Silicon Photodetectors, Optical Sensors and Infrared Emitters

Si-Fotodetektoren, Optische Sensoren und IR-Lumineszenzdioden

Silicon Photodetectors, Optical Sensors and Infrared Emitters

Si-Fotodetektoren, Optische Sensoren und IR-Lumineszenzdioden **111**

Silicon Photodetectors ..... **Si-Fotodetektoren** **113**

Summary of Types ..... Typenübersicht 113
Phototransistors ..... Fototransistoren 119
SMT Transistors ..... SMT Transistoren 119
SMT Transistors in low profile, narrow angle MIDLED package .. SMT Transistoren in flachem, engwinkligem MIDLED Gehäuse 120
Detector/Emitter in Multi TOPLED® package ..... Empfänger/Sender im Multi TOPLED® Gehäuse 120
Phototransistors in clear plastic package ..... Fototransistoren im klaren Plastikgehäuse 122
Plastic package with daylight blocking filter for 880/950 nm IRED ..... Plastikgehäuse mit Tageslichtsperrfilter für 880/950 nm IRED 123
Phototransistor Arrays in plastic package ..... Fototransistor-Zeilen im Plastikgehäuse 124
Phototransistors in metal package ..... Fototransistoren im Metallgehäuse 125
Photodiodes ..... Fotodioden 126
SMT PIN Photodiodes in clear package ..... SMT PIN Fotodioden in klarem Gehäuse 126
SMT PIN Photodiodes with daylight blocking filter ..... SMT PIN Fotodiode mit Tageslichtsperrfilter 127
SMT Dual Photodiodes ..... SMT Doppelfotodioden 128
PIN Photodiodes in clear plastic package ..... PIN Fotodioden in klarem Plastikgehäuse 128
PIN Photodiodes in clear plastic package ..... PIN Fotodioden in klarem Plastikgehäuse 129
PIN Photodiodes with daylight filter matched for 880 nm IRED .... PIN Fotodioden mit Tageslichtfilter für 880 nm IRED 129
PIN Photodiodes with daylight filter matched for 950 nm IRED .... PIN Fotodioden mit Tageslichtfilter für 950 nm IRED 130
PIN Photodiodes in metal package ..... PIN Fotodioden im Metallgehäuse 130
Photo ICs ..... Foto ICs 131
Schmitt Trigger ..... Schmitt Trigger 131
Photo IC for remote control ..... Foto IC für Fernsteuerung 131
Photodetectors for special applications ..... Fotodetektoren für spezielle Anwendungen 132
Blue sensitive photodiode ..... Blauempfindliche Fotodiode 132
Dual photodiodes ..... Doppelfotodioden 132
Ambient Light Sensors ..... Umgebungslichtsensoren 133
Photodiode Ambient Light Sensors ..... Fotodiode, Umgebungslichtsensor 133
Phototransistor Ambient Light Sensors ..... Fototransistor, Umgebungslichtsensor 133
High Accuracy Ambient Light Sensors ..... Hochgenauer Umgebungslichtsensor 133

Optical Sensors ..... **Optische Sensoren** **134**

Summary of Types ..... Typenübersicht 134
SMT Reflective Sensors ..... SMT Reflexlichtschranken 135
Schmitt Trigger ..... Schmitt Trigger 135
SMT Orientation Sensor ..... SMT Kippsensor 136
SMT Proximity Sensor ..... SMT Näherungssensor 136

Infrared Emitters ..... **IR-Lumineszenzdioden** **137**

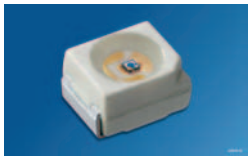
Summary of Types ..... Typenübersicht 137
SMT Emitters ..... SMT Emitter 142
Golden DRAGON® ..... Golden DRAGON® 142
MIDLED ..... MIDLED 142
SmartLED® ..... SmartLED® 142
TOPLED®/SIDELED® Family ..... TOPLED®/SIDELED® Familie 143
2 Emitters in Multi TOPLED® Package ..... 2 Sender in Multi TOPLED® Package 146
Detector/Emitter in Multi TOPLED® package ..... Empfänger/Sender im Multi TOPLED® Gehäuse 146
SMR ..... SMR 148
High power emitters for illumination ..... Hochleistungsemitter für Beleuchtung 149
High power emitters 850 nm ..... Hochleistungsemitter 850 nm 150
High speed emitters 950 nm ..... Sehr schnelle Emitter 950 nm 152
Emitters in plastic package ..... Emitter im Plastikgehäuse 153
Radial packages ..... Radiale Gehäuse 153
Sidelooker ..... Sidelooker 155
Arrays in plastic package ..... Zeilen im Plastikgehäuse 155
Emitters in metal package ..... Emitter im Metallgehäuse 156

Outline drawings ..... **Maßzeichnungen** **158**

Summary of Types | Typenübersicht

Phototransistors | Fototransistoren

SMT Transistors | SMT Transistoren

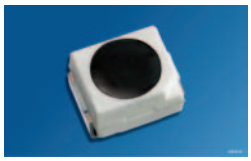


TOPLED®
SFH 320
Page / Seite: 119

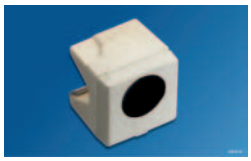
SIDELED®
SFH 325
Page / Seite: 119

TOPLED® with Lens
SFH 3219
Page / Seite: 119

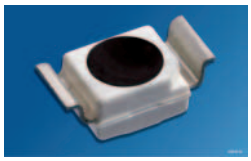
Multi TOPLED®
SFH 331 / SFH 7221 / SFH 7225
Page / Seite: 120



TOPLED®
SFH 320 FA
Page / Seite: 119



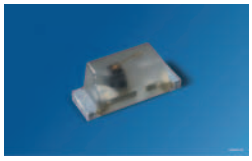
SIDELED®
SFH 325 FA
Page / Seite: 119



TOPLED® RG
SFH 3211 FA
Page / Seite: 119

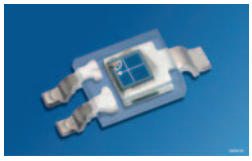
MIDLED
SFH 3600
Page / Seite: 120

SFH 3605
Page / Seite: 120



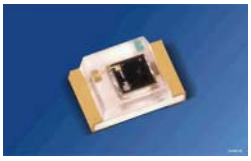
SmartLED® 0603
SFH 3010
Page / Seite: 119

Micro SIDELED®
SFH 3204
Page / Seite: 119

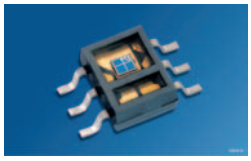


Smart DIL
SFH 3400 / SFH 3401
Page / Seite: 119

Smart DIL
SFH 3410
Page / Seite: 133



CHIPLED
SFH 3710
Page / Seite: 133



SFH 3201
Page / Seite: 120

Summary of Types | Typenübersicht

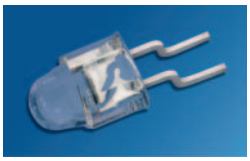
Phototransistors | Fototransistoren

Phototransistors in plastic package | Fototransistoren im Plastikgehäuse

SFH 309 / SFH 310
Page / Seite: 122

SFH 309 P / SFH 3310
Page / Seite: 122

SFH 300 / SFH 313 (not for new design) / SFH 314
Page / Seite: 122



SFH 3500
Page / Seite: 122

SFH 309 FA / SFH 310 FA
Page / Seite: 123

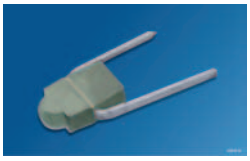
SFH 309 PFA
Page / Seite: 123

SFH 300 FA / SFH 313 FA / SFH 314FA
Page / Seite: 123

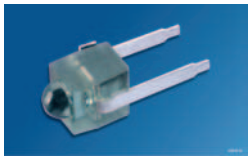
SFH 303 FA
Page / Seite: 123

LPT 80 A
Page / Seite: 122

SFH 3100 F
Page / Seite: 123



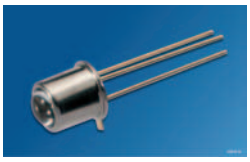
SFH 305
Page / Seite: 124



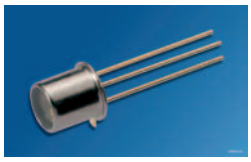
BPX 81
Page / Seite: 124

BPX 83
Page / Seite: 124

Phototransistors in metal package | Fototransistoren im Metallgehäuse



BPY 62 / BPX 43
Page / Seite: 125



BPX 38
Page / Seite: 125

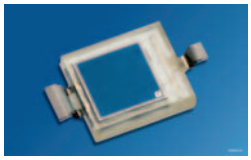
BP 103
Page / Seite: 125

Summary of Types | Typenübersicht

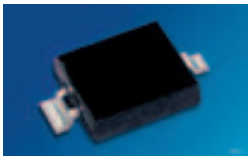
Photodiodes | Fotodioden

SMT PIN Photodiodes | SMT PIN Fotodioden

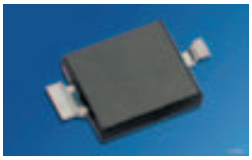
BP 104 S / BPW 34 S / BPW 34 BS
Page / Seite: 126



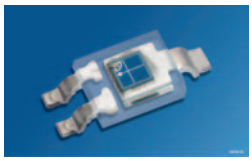
BPW 34 SR / BP 104 SR
Page / Seite: 126



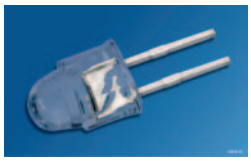
BP 104 FS / BP 104 FAS / BPW 34 FS / BPW 34 FAS
Page / Seite: 127



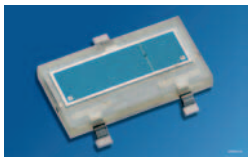
BPW 34 FSR / BPW 34 FASR / BP 104 FASR
Page / Seite: 127



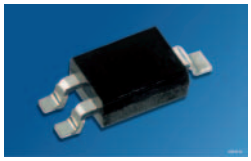
Smart DIL
SFH 2400
Page / Seite: 126



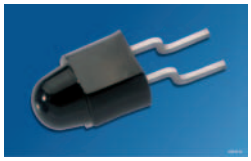
SMR
SFH 2505
Page / Seite: 126



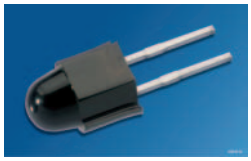
KOM 2125
Page / Seite: 128



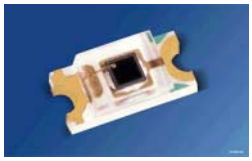
Smart DIL
SFH 2400 FA
Page / Seite: 127



SMR
SFH 2500 FA
Page / Seite: 127

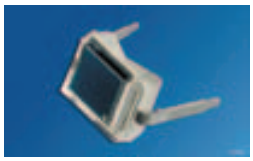


SMR
SFH 2505 FA
Page / Seite: 127



SFH 2701
Page / Seite: 126

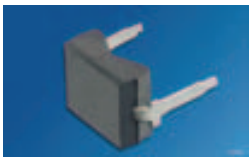
PIN Photodiodes in plastic package | PIN Fotodioden im Plastikgehäuse



BPW 34 / BPW 34 B
Page / Seite: 128

SFH 229 / SFH 2332 / SFH 2302
Page / Seite: 128

SFH 203 / SFH 213
Page / Seite: 128



BPW 34 F / BPW 34 FA / BP 104 F
Page / Seite: 130

SFH 206 K
Page / Seite: 128

SFH 229 FA
Page / Seite: 129

SFH 203 FA / SFH 213 FA
Page / Seite: 129

Summary of Types | Typenübersicht

Photodiodes | Fotodioden

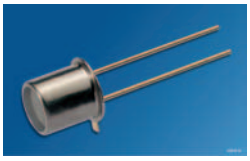
SFH 203 P
Page / Seite: 128

SFH 203 PFA
Page / Seite: 130

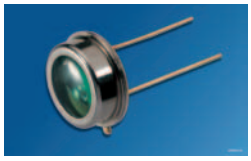
SFH 225 FA / SFH 235 FA
Page / Seite: 129

SFH 205 F / SFH 205 FA
Page / Seite: 130

PIN Photodiodes in metal package | PIN Fotodioden im Metallgehäuse



BPX 65
Page / Seite: 130

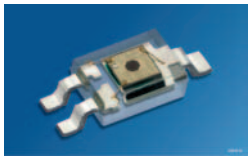


BPX 61
Page / Seite: 130

Summary of Types | Typenübersicht

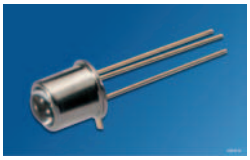
Photo ICs | Foto ICs

Schmitt Trigger



Smart DIL
SFH 5440
Page / Seite: 131

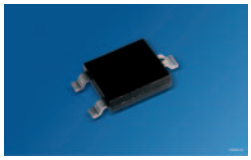
SFH 5140 F
Page / Seite: 131



SFH 5840
Page / Seite: 131

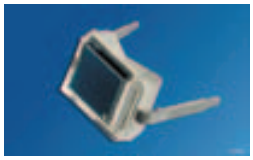
Photo IC for remote control | Foto IC für Fernsteuerung

SFH 5110
Page / Seite: 131



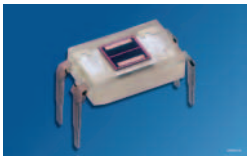
SFH 5410
Page / Seite: 131

Photodetectors for special applications | Fotodetektoren für spezielle Anwendungen



BPW 34 B
Page / Seite: 128

BPW 34 BS
Page / Seite: 126



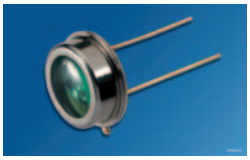
BPX 48
Page / Seite: 132

SFH 221
Page / Seite: 132

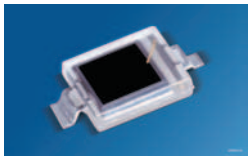
Summary of Types | Typenübersicht

Ambient Light Sensors | Umgebungslichtsensoren

Ambient Light Sensors | Umgebungslichtsensoren

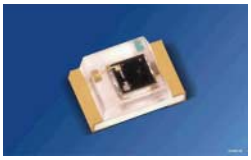


Photodiode
BPW 21
Page / Seite: 133

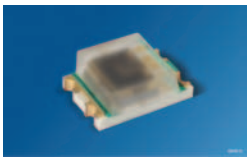


Photodiode
SFH 2430
Page / Seite: 133

Phototransistor
SFH 3410
Page / Seite: 133



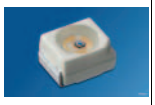
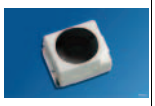
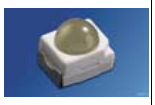
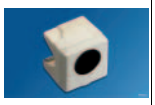
Phototransistor
SFH 3710
Page / Seite: 133

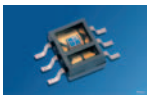


High Accuracy Ambient Light Sensor
SFH 5711
Page / Seite: 133

Phototransistor
SFH 3310
Page / Seite: 133

Phototransistors | Fototransistoren

Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensitive area typ. [mm²]	I_{PCE} [µA]	Measure-ment cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
SMT Transistors | SMT Transistoren										
 **SmartLED® 0603**	SFH 3010	± 80	0.04	≥ 25	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	15	420 ... 1100	7	Q65110A6458	51
 **TOPLED®**	SFH 320 SFH 320-3 SFH 320-3/4 SFH 320-4	± 60	0.038	16 ... 80 25 ... 50 25 ... 80 40 ... 80	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	35	450 ... 1150	7 7.5 8	Q65110A2471 Q65110A2469 Q65110A1781 Q65110A2510	2
 **TOPLED®**	SFH 320 FA SFH 320 FA-3 SFH 320 FA-3/4 SFH 320 FA-4	± 60	0.038	16 ... 80 25 ... 50 25 ... 80 40 ... 80	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	35	750 ... 1120	7 7.5 8	Q65110A2472 Q65110A2470 Q65110A2475 Q65110A1836	2
 **TOPLED® with Lens**	SFH 3219	± 25	0.038	≥ 63	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	35	450 ... 1150	7	Q65110A2651	49
 **TOPLED® RG**	SFH 3211 FA SFH 3211 FA-3/4	± 60	0.038	16 ... 80 25 ... 80	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	35	750 ... 1120	7 7.5	Q65110A2526 Q65110A2528	3
 **SIDELED®**	SFH 325 SFH 325-3 SFH 325-3/4 SFH 325-4	± 60	0.038	16 ... 80 25 ... 50 25 ... 80 40 ... 80	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	35	450 ... 1150	7 7.5 8	Q65110A2486 Q65110A2488 Q65110A2491 Q65110A2484	4
 **SIDELED®**	SFH 325 FA SFH 325 FA-3 SFH 325 FA-3/4 SFH 325 FA-4	± 60	0.038	16 ... 80 25 ... 50 25 ... 80 40 ... 80	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	35	750 ... 1120	7 7.5 8	Q65110A2487 Q65110A2482 Q65110A2490 Q65110A2485	4
 **Micro SIDE-LED®**	SFH 3204	± 60	0.04	≥ 32	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	15	450 ... 1120	7	Q65110A2506	81
 **SmartDIL**	SFH 3400 SFH 3400-2/3	± 60	0.55	63 ... 320 100 ... 320	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	20	460 ... 1080	24 29	Q65110A2629 Q65110A2634	9

Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensitive area typ. [mm²]	I_{PCE} [µA]	Measure-ment cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
 **SmartDIL**	SFH 3401	± 60	0.55	63 ... 320	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	20	460 ... 1080	24	Q65110A2635	10
	SFH 3401-2/3			100 ... 320				29	Q65110A2644	
	SFH 3201	± 60	0.55	63 ... 320	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	20	460 ... 1080	24	Q65110A1207	11
	SFH 3201-2/3			100 ... 320				29	Q65110A2479	

Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensitive area typ. [mm²]	I_{PCE} [µA]	Measure-ment cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
SMT Transistors in low profile, narrow angle MIDLED package | SMT Transistoren in flachem, engwinkligem MIDLED Gehäuse										
 **MIDLED**	SFH 3600	± 20	0.04	100 ... 500	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	35	500 ... 1100	45	Q65110A1573	97
	SFH 3600-2/3			100 ... 320				37	Q65110A2665	
	SFH 3600-3/4			160 ... 500				57	Q65110A2666	
 **MIDLED**	SFH 3605	± 20	0.04	100 ... 500	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	35	500 ... 1100	45	Q65110A1574	97
	SFH 3605-2/3			100 ... 320				37	Q65110A2663	
	SFH 3605-3/4			160 ... 500				57	Q65110A2664	

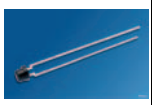
Package Gehäuse	Type Bezeichnung	Emitter Sender						Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
		λ_{peak} typ [nm]	Half angle φ [°]	I_V [mcd]	Measure-ment cond.	V_F [V]	Measure-ment cond.		
Detector/Emitter in Multi TOPLED® package | Empfänger/Sender im Multi TOPLED® Gehäuse									
 **Multi TOPLED®**	SFH 331-JK	635	± 60	6 (4 ... 12.5)	I_F = 10 mA	2 (≤ 2.6)	I_F = 10 mA	Q65110A2821	5

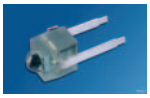
Detector Empfänger					
Radiant sensitive area typ. [mm²]	I_{PCE} [µA]	Measure-ment cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]
0.038	≥ 16	λ = 950 nm, E_e = 0.1 mW/cm², V_{CE} = 5 V	35	380 ... 1150	7

Package Gehäuse	Type Bezeichnung	Emitter Sender						Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
		λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measurement cond.	V_F [V]	Measurement cond.		
Detector/Emitter in Multi TOPLED® package | Empfänger/Sender im Multi TOPLED® Gehäuse									
 **Multi TOPLED®**	SFH 7221	880	± 60	> 4	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	Q65110A2741	6
		Detector Empfänger							
		Radiant sensitive area typ. [mm^2]	I_{PCE} [µA]	Measurement cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]		
		0.038	≥ 16	λ = 880 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	380 ... 1150	7		

Package Gehäuse	Type Bezeichnung	Emitter Sender						Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
		λ_{peak} typ [nm]	Half angle φ [°]	I_V [mcd]	Measurement cond.	V_F [V]	Measurement cond.		
Detector/Emitter in Multi TOPLED® package | Empfänger/Sender im Multi TOPLED® Gehäuse									
 **Multi TOPLED®**	SFH 7225	591	± 60	63 ... 200	I_F = 20 mA	2	I_F = 20 mA, t_p = 20 ms	Q65110A2743	5
		Detector Empfänger							
		Radiant sensitive area typ. [mm^2]	I_{PCE} typ [µA]	Measurement cond.	V_{CE} max. [V]	Crosstalk $I_{PCE, typ}$ [mA]	Measurement Conditions		
		0.038	650	Std. Light A, E_v = 1000 lx, V_{CE} = 5V	35	0.5 ... 5	I_F = 20 mA, V_{CE} = 5 V		

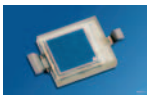
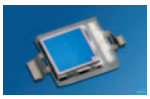
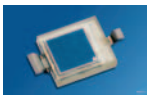
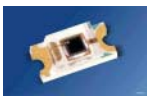
Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensitive area typ. [mm²]	I_{PCE} [mA]	Measure-ment cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
Phototransistors in clear plastic package | Fototransistoren im klaren Plastikgehäuse										
 **T 1**	SFH 309	± 12	0.038	0.4 ... 5	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	380 ... 1150	7	Q62702P0859	22
	SFH 309-3/4			0.63 ... 2				6.5	Q62702P3592	
	SFH 309-4			1 ... 2				7	Q62702P0998	
	SFH 309-4/5			1 ... 3.2				7.5	Q62702P3593	
	SFH 309-5			1.6 ... 3.2				8	Q62702P0999	
	SFH 309-5/6			1.6 ... 5				8.5	Q62702P3594	
 **T 1**	SFH 310	± 25	0.11	0.63 ... 3.2	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	70	450 ... 1100	9	Q62702P0874	23
	SFH 310-2/3			0.63 ... 2				7.5	Q62702P3595	
 **T 1**	SFH 309 P	± 75	0.038	≥ 0.063	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	380 ... 1180	6	Q62702P0245	24
 **T 1 3/4**	SFH 314	± 40	0.55	1 ... 3.2	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	70	460 ... 1080	11	Q62702P1668	26
	SFH 314-2/3								Q62702P3600	
 **T 1 3/4**	SFH 300	± 25	0.11	≥ 0.63	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	450 ... 1100	10	Q62702P1189	82
	SFH 300-3/4			≥ 1					Q62702P3586	
 **T1 3/4 SMR**	SFH 3500	± 13	0.55	4 ... 20	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	70	450 ... 1060	19	Q65110A2636	7
	SFH 3500-5/6			6.3 ... 20				22	Q65110A3458	
	LPT 80A	± 35	0.11	≥ 0.25	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	30	450 ... 1100	10	Q68000A7852	28

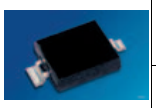
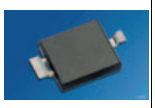
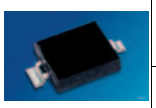
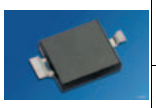
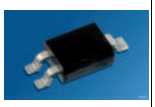
Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensitive area typ. [mm²]	I_{PCE} [mA]	Measure-ment cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
Plastic package with daylight blocking filter for 880/950 nm IRED | Plastikgehäuse mit Tageslichtsperrfilter für 880/950 nm IRED										
 **T 1**	SFH 309 FA	± 12	0.038	0.4 ... 5	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	730 ... 1120	7	Q62702P0941	22
	SFH 309 FA-3/4			0.63 ... 2				6.5	Q62702P3590	
	SFH 309 FA-4			1 ... 2				7	Q62702P0178	
	SFH 309 FA-4/5			1 ... 3.2				7.5	Q62702P3591	
	SFH 309 FA-5			1.6 ... 3.2				8	Q62702P0180	
	SFH 309 FA-5/6			1.6 ... 5				8.5	Q62702P5199	
 **T 1**	SFH 310 FA	± 25	0.11	0.4 ... 3.2	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	70	740 ... 1100	9	Q62702P1673	23
	SFH 310 FA-2/3			0.63 ... 2				7.5	Q62702P3596	
 **T 1**	SFH 309 PFA	± 75	0.038	≥ 0.063	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	730 ... 1120	6	Q62702P0246	24
 **T 1 3/4**	SFH 313 FA	± 10	0.55	≥ 2.5	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	70	740 ... 1080	10	Q62702P1674	25
	SFH 313 FA-2/3			4 ... 12.5				11	Q62702P3597	
	SFH 313 FA-3/4			≥ 6.3				13	Q62702P5196	
 **T 1 3/4**	SFH 314 FA	± 40	0.55	≥ 0.63	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	70	740 ... 1080	11	Q62702P1675	26
	SFH 314 FA-2/3			1 ... 3.2					Q62702P3599	
 **T 1 3/4**	SFH 300 FA	± 25	0.11	≥ 0.63	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	730 ... 1120	10	Q62702P1193	82
	SFH 300 FA-3/4			≥ 1					Q62702P3585	
 **T 1 3/4**	SFH 303 FA	± 20	0.11	≥ 1	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	750 ... 1120	13	Q62702P0958	27
	SFH 303 FA-3/4			≥ 1.6				14	Q62702P3587	
	SFH 3100 F	± 14	0.11	0.4 ... 5	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	30	840 ... 1080	9	Q62702P5073	29

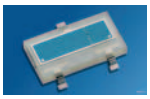
Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensitive area typ. [mm²]	I_{PCE} [mA]	Measure-ment cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
Phototransistor Arrays in plastic package | Fototransistor-Zeilen im Plastikgehäuse										
	SFH 305	± 16	0.11	0.25 ... 1.25	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	450 ... 1100	6	Q62702P0836	31
	SFH 305-2/3			0.25 ... 0.8					Q62702P3589	
	BPX 81	± 18	0.11	≥ 0.25	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	450 ... 1100	7	Q62702P0020	32
	BPX 81-2/3			0.25 ... 0.8					Q62702P3583	
	BPX 81-3			0.4 ... 0.8					Q62702P0043S003	
	BPX 81-3/4			≥ 0.4					Q62702P3584	
	BPX 81-4			≥ 0.63					Q62702P0043S004	
 **Array**	BPX 82	± 18	0.11	≥ 0.32	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	450 ... 1100	6	Q62702P0021	33
	BPX 83								Q62702P0025	
	BPX 84								Q62702P0030	
	BPX 85								Q62702P0031	
	BPX 86								Q62702P0022	
	BPX 87								Q62702P0032	
	BPX 88								Q62702P0033	
	BPX 89								Q62702P0026	
	BPX 80								Q62702P0028	

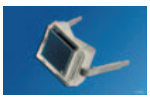
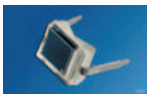
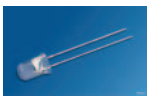
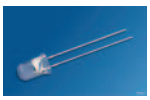
Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensitive area typ. [mm²]	I_{PCE} [mA]	Measure-ment cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
Phototransistors in metal package | Fototransistoren im Metallgehäuse										
 **TO-18**	BPY 62	± 8	0.11	0.5 ... 4	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	400 ... 1100	8	Q60215Y0062	30
	BPY 62-3			0.8 ... 1.6				7	Q60215Y1112	
	BPY 62-3/4			0.8 ... 2.5				8	Q62702P5198	
	BPY 62-4			1.25 ... 2.5				9	Q60215Y1113	
 **TO 18**	BPX 43	± 15	0.675	≥ 0.8	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	50	450 ... 1100	14	Q62702P0016	30
	BPX 43-3/4			1.25 ... 4					Q62702P3581	
	BPX 43-4			2 ... 4				15	Q62702P0016S004	
	BPX 43-4/5			≥ 2				17	Q62702P3582	
	BPX 43-5			≥ 3.2				18	Q62702P0016S005	
 **TO 18**	BPX 38	± 40	0.675	≥ 0.2	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	50	450 ... 1120	12	Q62702P0015	67
	BPX 38-2/3			0.2 ... 0.63				11	Q62702P3578	
	BPX 38-3			0.32 ... 0.63				12	Q62702P0015S003	
	BPX 38-4			0.5 ... 1				15	Q62702P0015S004	
 **TO 18**	BP 103	± 55	0.11	≥ 0.08	λ = 950 nm, E_e = 0.5 mW/cm², V_{CE} = 5 V	35	450 ... 1100	8	Q62702P0075	68
	BP 103-3/4			0.125 ... 0.4					Q62702P3577	

Photodiodes | Fotodioden

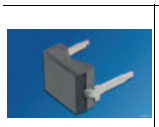
Package Gehäuse	Type Bezeichnung	Half angle φ ± [°]	Radiant sensitive area typ. [mm²]	I_P [µA]	Measurement cond.	I_R [nA]	Measurement cond.	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Measurement cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
SMT PIN Photodiodes in clear package | SMT PIN Fotodioden in klarem Gehäuse												
 **SMT DIL**	BP 104 S	± 60	4.84	55 (≥ 40)	E_v = 1000 lx, Std. Light A, V_R = 5 V	2 (≤ 30)	V_R = 10 V	400 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A2626	13
 **SMT DIL**	BP 104 SR	± 60	4.84	55 (≥ 40)	E_v = 1000 lx, Std. Light A, V_R = 5 V	2 (≤ 30)	V_R = 10 V	400 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A4262	15
 **SMT DIL**	BPW 34 S	± 60	7.02	80 (≥ 50)	E_v = 1000 lx, Std. Light A, V_R = 5 V	2 (≤ 30)	V_R = 10 V	400 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A1209	14
 **SMT DIL**	BPW 34 SR	± 60	7.02	80 (≥ 50)	E_v = 1000 lx, Std. Light A, V_R = 5 V	2 (≤ 30)	V_R = 10 V	400 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A2701	15
 **SMT DIL**	BPW 34 BS	± 60	7.45	75	E_v = 1000 lx, Std. Light A, V_R = 5 V	2 (≤ 30)	V_R = 10 V	350 ... 1100	0.025	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A2625	14
 **SmartDIL**	SFH 2400	± 60	1.00	10 (≥ 6)	E_v = 1000 lx, Std. Light A, V_R = 5 V	1 (≤ 5)	V_R = 20 V	400 ... 1100	0.005	V_R = 20 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A2628	16
 **T1 3/4 SMR**	SFH 2505	± 15	1.00	100	E_v = 1000 lx, Std. Light A, V_R = 5 V	1 (≤ 5)	V_R = 20 V	400 ... 1100	0.005	V_R = 20 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A1203	8
	SFH 2701	± 60	0.36	1.4	780nm, V_R = 5 V, 0,5mW/cm²	0.05 (≤ 5)	V_R = 5 V	400 ... 1050	0.002	V_R = 5 V; R_L = 50 Ω; λ = 780 nm; I_p = 1 mA	Q65110A2960	95

Package Gehäuse	Type Bezeichnung	Half angle φ ± [°]	Radiant sensitive area typ. [mm²]	I_P [µA]	Measurement cond.	I_R [nA]	Measurement cond.	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Measurement cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
SMT PIN Photodiodes with daylight blocking filter | SMT PIN Fotodiode mit Tageslichtsperrfilter												
 **SMT DIL**	BP 104 FS	± 60	4.84	34 (≥ 25)	λ = 950 nm, E_e = 1 mW/cm², V_R = 5 V	2 (≤ 30)	V_R = 10 V	780 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A2627	13
	BP 104 FAS				λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V			730 ... 1100			Q65110A2672	
 **SMT DIL**	BP 104 FASR	± 60	4.84	34 (≥ 25)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	2 (≤ 30)	V_R = 10 V	730 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A4263	21
 **SMT DIL**	BPW 34 FS	± 60	7.02	50 (≥ 40)	λ = 950 nm, E_e = 1 mW/cm², V_R = 5 V	2 (≤ 30)	V_R = 10 V	780 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A2700	14
	BPW 34 FAS				λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V			730 ... 1100			Q65110A3121	
 **SMT DIL**	BPW 34 FSR	± 60	7.02	50 (≥ 40)	λ = 950 nm, E_e = 1 mW/cm², V_R = 5 V	2 (≤ 30)	V_R = 10 V	780 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A2740	15
	BPW 34 FASR				λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V			730 ... 1100			Q65110A2699	
 **Smart DIL**	SFH 2400 FA	± 60	1.00	6.2 (≥ 3.6)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	1 (≤ 5)	V_R = 20 V	750 ... 1100	0.005	V_R = 20 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A2638	16
 **T1 3/4 SMR**	SFH 2500 FA	± 15	1.00	70 (≥ 50)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	1 (≤ 5)	V_R = 20 V	750 ... 1100	0.005	V_R = 20 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A1202	7
 **T1 3/4 SMR**	SFH 2505 FA	± 15	1.00	70 (≥ 50)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	1 (≤ 5)	V_R = 20 V	750 ... 1100	0.005	V_R = 20 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A1204	8

Package Gehäuse	Type Bezeichnung	Half angle φ ± [°]	Radiant sensitive area typ. [mm²]	I_P [µA]	Measurement cond.	I_R [nA]	Measurement cond.	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Measurement cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
SMT Dual Photodiodes | SMT Doppelfotodioden												
	KOM 2125	± 60	4 diode A 10 diode B	40 (≥ 30) diode A 10 (≥ 75) diode B	E_v = 1000 lx, Std. Light A, V_R = 5 V	5 (≤ 30) diode A 10 (≤ 30) diode B	V_R = 10 V	400 ... 1100	0.025	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A2703	17

Package Gehäuse	Type Bezeichnung	Half angle φ ± [°]	Radiant sensitive area typ. [mm²]	I_P [µA]	Measurement cond.	I_R [nA]	Measurement cond.	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Measurement cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
PIN Photodiodes in clear plastic package | PIN Fotodioden in klarem Plastikgehäuse												
 **DIL**	BPW 34	± 60	7.02	80 (≥ 50)	E_v = 1000 lx, Std. Light A, V_R = 5 V	2 (≤ 30)	V_R = 10 V	400 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0073	84
 **DIL**	BPW 34 B	± 60	7.45	75	E_v = 1000 lx, Std. Light A, V_R = 5 V	2 (≤ 30)	V_R = 10 V	350 ... 1100	0.025	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A3126	84
 **TO-92**	SFH 206 K	± 60	7.02	80 (≥ 50)	E_v = 1000 lx, Std. Light A, V_R = 5 V	2 (≤ 30)	V_R = 10 V	400 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0129	35
 **T 1**	SFH 229	± 17	0.31	28 (≥ 18)	E_v = 1000 lx, Std. Light A, V_R = 5 V	0.05 (≤ 5)	V_R = 10 V	380 ... 1100	0.01	V_R = 10 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0215	22
 **T 1 3/4**	SFH 203	± 20	1.00	80 (≥ 50)	E_v = 1000 lx, Std. Light A, V_R = 5 V	1 (≤ 5)	V_R = 20 V	400 ... 1100	0.005	V_R = 20 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0955	36
 **T 1 3/4**	SFH 213	± 10	1.00	135 (≥ 100)	E_v = 1000 lx, Std. Light A, V_R = 5 V	1 (≤ 5)	V_R = 20 V	400 ... 1100	0.005	V_R = 20 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0930	25
 **T 1 3/4**	SFH 203 P	± 75	1.00	9.5 (≥ 5)	E_v = 1000 lx, Std. Light A, V_R = 5 V	1 (≤ 5)	V_R = 20 V	400 ... 1100	0.005	V_R = 20 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0942	37

Package Gehäuse	Type Bezeichnung	Half angle φ ± [°]	Radiant sensitive area typ. [mm²]	I_P [µA]	Measurement cond.	I_R [nA]	Measurement cond.	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Measurement cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
PIN Photodiodes in clear plastic package | PIN Fotodioden in klarem Plastikgehäuse												
 **T 1**	SFH 2302	± 17	0.36	≥ 10	λ = 780 nm, E_e = 0.5 mW/cm², V_R = 5 V	0.05 (≤ 5)	V_R = 5 V	400 ... 1050	0.002	V_R = 5 V; R_L = 50 Ω; λ = 780 nm; I_p = 1 mA	Q65110A6343	22
 **T 1**	SFH 2332	± 17	0.36	≥ 4.5	λ = 405 nm, E_e = 0.5 mW/cm², V_R = 5 V	0.035 (≤ 5)	V_R = 10 V	350 ... 1050	0.002	V_R = 10 V; R_L = 50 Ω; λ = 405 nm; I_p = 1 mA	Q65110A6342	22

Package Gehäuse	Type Bezeichnung	Half angle φ ± [°]	Radiant sensitive area typ. [mm²]	I_P [µA]	Measurement cond.	I_R [nA]	Measurement cond.	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Measurement cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
PIN Photodiodes with daylight filter matched for 880 nm IRED | PIN Fotodioden mit Tageslichtfilter für 880 nm IRED												
 **DIL**	BPW 34 FA	± 60	7.02	50 (≥ 40)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	2 (≤ 30)	V_R = 10 V	730 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P1129	84
 **TO-92**	SFH 225 FA	± 60	4.84	34 (≥ 25)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	2 (≤ 30)	V_R = 10 V	740 ... 1120	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P1051	38
 **TO-92**	SFH 235 FA	± 65	7.02	50 (≥ 40)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	2 (≤ 30)	V_R = 10 V	740 ... 1120	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0273	38
 **TO-92**	SFH 205 FA	± 60	7.02	60 (≥ 45)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	2 (≤ 30)	V_R = 10 V	740 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P1677	39
 **T 1**	SFH 229 FA	± 17	0.31	20 (≥ 10.8)	λ = 950 nm, E_e = 1 mW/cm², V_R = 5 V	0.05 (≤ 5)	V_R = 10 V	730 ... 1100	0.01	V_R = 10 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0216	22
 **T 1 3/4**	SFH 203 FA	± 20	1.00	50 (≥ 30)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	1 (≤ 5)	V_R = 20 V	800 ... 1100	0.005	V_R = 20 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0956	36

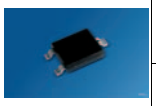
Package Gehäuse	Type Bezeichnung	Half angle φ ± [°]	Radiant sensitive area typ. [mm²]	I_P [µA]	Measurement cond.	I_R [nA]	Measurement cond.	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Measurement cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
 **T 1 3/4**	SFH 213 FA	± 10	1.00	90 (≥ 65)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	1 (≤ 5)	V_R = 20 V	750 ... 1100	0.005	V_R = 20 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P1671	25
 **T 1 3/4**	SFH 203 PFA	± 75	1.00	6.2 (≥ 3.6)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	1 (≤ 5)	V_R = 20 V	750 ... 1100	0.005	V_R = 20 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0947	37

Package Gehäuse	Type Bezeichnung	Half angle φ ± [°]	Radiant sensitive area typ. [mm²]	I_P [µA]	Measurement cond.	I_R [nA]	Measurement cond.	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Measurement cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
PIN Photodiodes with daylight filter matched for 950 nm IRED | PIN Fotodioden mit Tageslichtfilter für 950 nm IRED												
 **DIL**	BP 104 F	± 60	4.84	34 (≥ 25)	λ = 950 nm, E_e = 1 mW/cm², V_R = 5 V	2 (≤ 30)	V_R = 10 V	800 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0084	41
 **DIL**	BPW 34 F	± 60	7.02	50 (≥ 40)	λ = 950 nm, E_e = 1 mW/cm², V_R = 5 V	2 (≤ 30)	V_R = 10 V	780 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0929	84
 **TO-92**	SFH 205 F	± 60	7.02	60 (≥ 45)	λ = 950 nm, E_e = 1 mW/cm², V_R = 5 V	2 (≤ 30)	V_R = 10 V	800 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0102	39

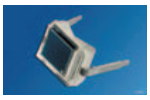
Package Gehäuse	Type Bezeichnung	Half angle φ ± [°]	Radiant sensitive area typ. [mm²]	I_P [µA]	Measurement cond.	I_R [nA]	Measurement cond.	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Measurement cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
PIN Photodiodes in metal package | PIN Fotodioden im Metallgehäuse												
 **TO 18**	BPX 65	± 40	1.00	10 (≥ 5.5)	E_v = 1000 lx, Std. Light A, V_R = 5 V	1 (≤ 5)	V_R = 20 V	350 ... 1100	0.012	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62702P0027	43
	BPX 61	± 55	7.02	70 (≥ 50)	E_v = 1000 lx, Std. Light A, V_R = 5 V	2 (≤ 30)	V_R = 10 V	400 ... 1100	0.02	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q62705P0025	44

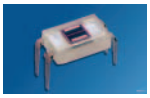
Photo ICs | Foto ICs

Package Gehäuse	Type Bezeichnung	Half angle φ [°]	V_{CC} [V]	$E_{e\ typ}$ [mW/m²]	Measure-ment cond.	$\lambda_{10\%}$ typ. [nm]	I_{OUT} max [mA]	t_{PLH} [µs]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
Schmitt Trigger										
	SFH 5440	± 60	4 ... 18	+1700 (≤ +3200)	V_{CC} = 5V, λ = 950 nm	400 ... 1100	16	5 (≤ 15)	Q65110A1212	18
	SFH 5140 F	± 12	4 ... 18	+150 (≤ +500)	V_{CC} = 5V, λ = 950 nm	840 ... 1080	16	5 (≤ 15)	Q62702P5112	19
	SFH 5840	± 5	4 ... 18	+100 (≤ +320)	V_{CC} = 5V, λ = 950 nm	400 ... 1100	16	5 (≤ 15)	Q62702P5116	20

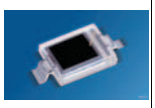
Package Gehäuse	Type Bezeichnung	f_0	Half angle φ [°]	$E_{e\ typ}$ [mW/m²]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
Photo IC for remote control | Foto IC für Fernsteuerung						
	SFH 5110-30	30	h.: ± 50, v.: ± 30	0.35 (≤ 0.5)	Q62702P5088	1
	SFH 5110-33	33			Q62702P5089	
	SFH 5110-36	36			Q62702P5090	
	SFH 5110-38	38			Q62702P5091	
	SFH 5110-40	40			Q62702P5092	
 SMT DIL	SFH 5410-36	36	± 60	1.4 (≤ 2.0)	Q65110A1727	78
	SFH 5410-38	38			Q65110A3909	

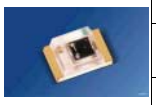
Photodetectors for special applications | Fotodetektoren für spezielle Anwendungen

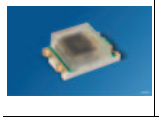
Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensitive area typ. [mm²]	I_{SC} [µA]	Measurement cond.	I_R [nA]	Measurement cond.	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Measurement cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
Blue sensitive photodiode | Blauempfindliche Fotodiode												
 **SMT DIL**	BPW 34 BS	± 60	7.45	7.4 (≥ 5.4)	E_e = 0.5mW/cm², λ = 400nm	2 (≤ 30)	V_R = 10 V	350 ... 1100	0.025	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A2625	14
 **DIL**	BPW 34 B	± 60	7.45	7.4 (≥ 5.4)	E_e = 0.5mW/cm², λ = 400nm	2 (≤ 30)	V_R = 10 V	350 ... 1100	0.025	V_R = 5 V; R_L = 50 Ω; λ = 850 nm; I_p = 800 µA	Q65110A3126	84
 **T 1**	SFH 2332	± 17	0.36		-	0.035 (≤ 5)	V_R = 10 V	350 ... 1050	0.002	V_R = 10 V; R_L = 50 Ω; λ = 405 nm; I_p = 1 mA	Q65110A6342	22

Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensitive area typ. [mm²]	I_P [µA]	Measurement cond.	I_R [nA]	Measurement cond.	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]	Measurement cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
Dual photodiodes | Doppelfotodioden												
	SFH 221	± 55	1.54	24 (≥ 15)	E_v = 1000 lx, Std. Light A, V_R = 5 V	10 (≤ 100)	V_R = 10 V	400 ... 1100	0.5	V_R = 5 V; R_L = 1 kΩ; λ = 850 nm; I_p = 20 µA	Q62702P0270	45
	BPX 48	± 60	1.54	24 (≥ 15)	E_v = 1000 lx, Std. Light A, V_R = 5 V	10 (≤ 100)	V_R = 10 V	400 ... 1150	0.5	V_R = 5 V; R_L = 1 kΩ; λ = 850 nm; I_p = 20 µA	Q62702P0017S001	46

Ambient Light Sensors | Umgebungslichtsensoren

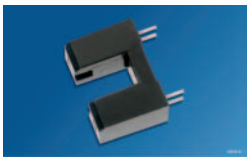
Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensitive area typ. [mm²]	I_P [µA]	Measure-ment cond.	I_R [nA]	Measure-ment cond.	$\lambda_{10\%}$ typ. [nm]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
Photodiode Ambient Light Sensors | Fotodiode, Umgebungslichtsensor										
	BPW 21	± 55	7.45	10 (≥ 5.5)	E_v = 1000 lx, Std. Light A, V_R = 5 V	2 (≤ 30)	V_R = 5 V	350 ... 820	Q62702P0885	44
 **SMT DIL**	SFH 2430	± 60	7.02	5.8 (≥ 4)	E_v = 1000 lx, Std. Light A, V_R = 5 V	0.1 (≤ 5)	V_R = 5 V	400 ... 900	Q65110A2673	83

Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensitive area typ. [mm²]	I_{PCE} [µA]	Measure-ment cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
Phototransistor Ambient Light Sensors | Fototransistor, Umgebungslichtsensor									
 **T 1**	SFH 3310	± 75	0.29	2.5 ... 8	λ = 560 nm, E_e = 10 µW/cm², V_{CE} = 5 V	5.5	350 ... 970	Q65110A5343	24
	SFH 3410	± 60	0.29	3.2 ... 25	Std. Light A, E_v = 20 lx, V_{CE} = 5V	5.5	350 ... 970	Q65110A1211	12
	SFH 3410-1/2			3.2 ... 10				Q65110A2653	
	SFH 3410-2/3			5 ... 16				Q65110A2654	
	SFH 3410-3/4			8 ... 25				Q65110A2655	
	SFH 3710	± 60	0.29	2.5 ... 12.5	λ = 560 nm, E_e = 10 µW/cm², V_{CE} = 5 V	5.5	350 ... 950	Q65110A3107	90
	SFH 3710-2/3			2.5 ... 8				Q65110A3512	
	SFH 3710-3/4			4 ... 12.5				Q65110A3511	

Package Gehäuse	Type Bezeichnung	Half angle φ [°]	Radiant sensi-tive area typ. [mm²]	I_{OUT} [mA]	Measurement Conditions	$\lambda_{10\%}$ typ. [nm]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
High Accuracy Ambient Light Sensors | Hochgenauer Umgebungslichtsensor								
	SFH 5711-2/3	± 60	0.16	0.027 ... 0.032	Std. Light A, E_v = 1000 lx, V_{CE} = 5V	475 ... 650	Q65110A4513	91

Summary of Types | Typenübersicht

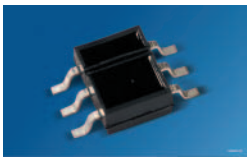
Slotted Interrupters | Gabellichtschranken



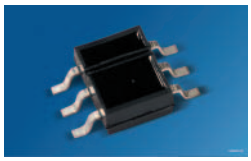
SFH 9315
Page / Seite: 135

SFH 9500
Page / Seite: 135

SMT Reflective Sensors | SMT Reflexlichtschranken

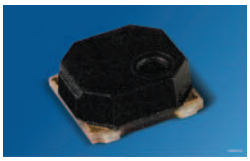


SFH 9201 / SFH 9202
Page / Seite: 135



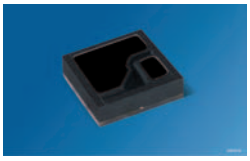
Schmitt Trigger
SFH 9240
Page / Seite: 135

SMT Orientation Sensor | SMT Kippsensor



SFH 7710
Page / Seite: 136

SMT Proximity Sensor | SMT Näherungssensor

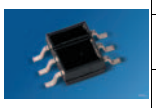
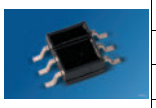


SFH 7740 / SFH7741
Page / Seite: 136

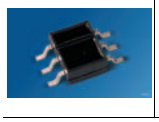
Slotted Interrupters | Gabellichtschranken

Package Gehäuse	Type Bezeichnung	Features	Slot Width [mm]	Aperture slit width on emitter / sensor side typ [mm]	I_{PCE} min [µA]	I_{CE0} [nA]	Measure-ment cond.	V_F [V]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
	SFH 9315	horizontal slits	5	0.5 / 0.5	700	1 (≤ 50)	V_{CE} = 20 V	1.2 (≤ 1.4)	Q65110A1216	47
	SFH 9500	with vertical aperture slits, SMT version, suitable for reflow soldering, locating pins	5	0.5 / 0.5	1000	1 (≤ 50)	V_{CE} = 20 V	1.2 (≤ 1.4)	Q65110A3108	98

SMT Reflective Sensors | SMT Reflexlichtschranken

Package Gehäuse	Type Bezeichnung	I_{PCE} [µA]	Measure-ment cond.	I_{CE0} [nA]	Measure-ment cond.	V_{CE} max. [V]	V_F [V]	Measure-ment cond.	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
	SFH 9201	250 ... 2000	Kodak neu-tral white testcard with 90% reflection, V_{CE} = 5 V, d = 1 mm, I_F = 10 mA	3 (≤ 200)	V_{CE} = 20V, E = 0	16	1.25 (≤ 1.65)	I_F = 50 mA	Q65110A2708	48
	SFH 9201-2/3	400 ... 1250							Q65110A2698	
	SFH 9201-3/4	630 ... 2000							Q65110A2716	
	SFH 9202	63 ... 800	Kodak neu-tral white testcard with 90% reflection, V_{CE} = 5 V, d = 1 mm, I_F = 10 mA	1 (≤ 50)	V_{CE} = 20 V	16	1.25 (≤ 1.65)	I_F = 50 mA	Q65110A2712	48
	SFH 9202-2/3	63 ... 200							Q65110A2705	
	SFH 9202-3/4	100 ... 320							Q65110A2710	
	SFH 9202-4/5	160 ... 500							Q65110A2709	
	SFH 9202-5/6	250 ... 800							Q65110A2711	

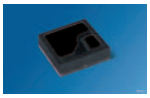
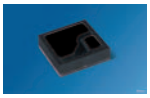
Schmitt Trigger

Package Gehäuse	Type Bezeichnung	Features	V_{CC} [V]	$I_{F, ON}$ [mA]	Measurement cond.	$E_{e,off}$ / $E_{e,on}$	V_F [V]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
	SFH 9240	Schmitt Trigger Output, active "low"	4 ... 18	3 (< 10)	Kodak neutral white testcard with 90% reflection, V_{CC} = 5 V, d = 1 mm	0.6 (0.5 ... 0.9)	1.25 (≤ 1.65)	Q65110A2714	48

SMT Orientation Sensor | SMT Kippsensor

Package Gehäuse	Type Bezeichnung	V_{out} at horizontal position	V_{out} at vertical postion	V_{cc} [V]	I_{DD} typ [mA]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
	SFH 7710	low	high	2.3 ... 3.6	0.023	Q65110A4407	96
	SFH 7710 R33					Q65110A6819	

SMT Proximity Sensor | SMT Näherungssensor

Package Gehäuse	Type Bezeichnung	Working distance typ [mm]	V_{cc} [V]	max. Sink Current [mA]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
	SFH 7740	0.5 ... 4	2.3 ... 3.6	10	Q65110A6668	76
	SFH 7741	0.5 ... 20	2.3 ... 3.6	10	Q65110A7073	76

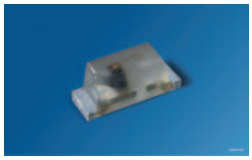
Summary of Types | Typenübersicht

SMT Emitters | SMT Emitter

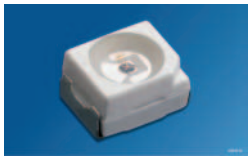
Golden DRAGON®
SFH 4230 / SFH 4231
Page / Seite: 142

MIDLED
SFH 4600 / SFH 4650 / SFH 4680
Page / Seite: 142

MIDLED
SFH 4605 / SFH 4655 / SFH 4685
Page / Seite: 142

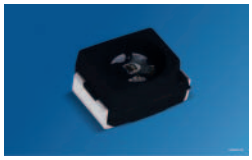


SmartLED® 0603
SFH 4010 / SFH 4050 / SFH 4080
Page / Seite: 142



TOPLED®
SFH 420 / SFH 4211 / SFH 421 / SFH 4200 / SFH 4252
Page / Seite: 143

SIDELED®
SFH 425 / SFH 426 / SFH 4205 / SFH 4255
Page / Seite: 143



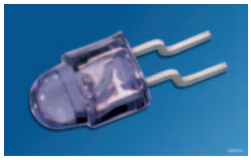
TOPLED®
SFH 4257 / SFH 4271 / SFH 4272 / SFH 4273
Page / Seite: 144

TOPLED® RG
SFH 4281
Page / Seite: 144

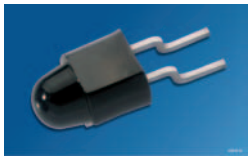
Mini TOPLED®
SFH 4203
Page / Seite: 144

TOPLED® with Lens
SFH 4209 / SFH 4289
Page / Seite: 145

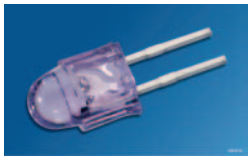
Multi TOPLED®
SFH 331 / SFH 7222 / SFH 7221 / SFH 7225
Page / Seite: 146



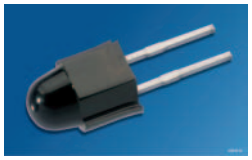
SMR
SFH 4580
Page / Seite: 148



SMR
SFH 4500 / SFH 4510
Page / Seite: 148



SMR
SFH 4585
Page / Seite: 148



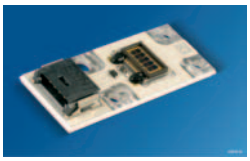
SMR
SFH 4505 / SFH 4515
Page / Seite: 148

Summary of Types | Typenübersicht

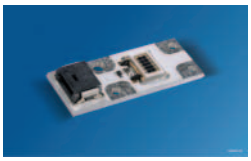
SMT Emitters | SMT Emitter

Power TOPLED®
SFH 4250
Page / Seite: 144

Power TOPLED® with Lens
SFH 4258 / SFH 4259
Page / Seite: 145

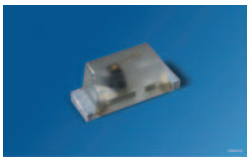


OSTAR® Observation
SFH 4730
Page / Seite: 149



OSTAR® Observation
SFH 4740
Page / Seite: 149

High power emitters 850 nm | Hochleistungsemitter 850 nm



SmartLED® 0603
SFH 4050
Page / Seite: 143

Power TOPLED®
SFH 4250
Page / Seite: 144

Power TOPLED® with Lens
SFH 4258 / SFH 4259
Page / Seite: 145

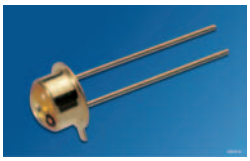
MIDLED
SFH 4650
Page / Seite: 142

MIDLED
SFH 4655
Page / Seite: 142

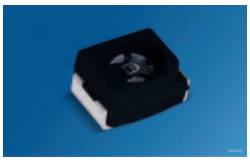
SFH 4255
Page / Seite: 144

SFH 4550 / SFH 4556
Page / Seite: 151

SFH 4350
Page / Seite: 151



SFH 4850 E7800
Page / Seite: 151

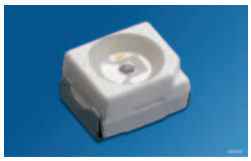


SFH 4257
Page / Seite: 144

Golden DRAGON®
SFH 4230 / SFH 4231
Page / Seite: 142

Summary of Types | Typenübersicht

High speed emitters 950 nm | Sehr schnelle Emitter 950 nm



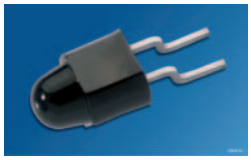
TOPLED®
SFH 4200
Page / Seite: 143

TOPLED® with Lens
SFH 4209
Page / Seite: 145

Golden DRAGON®
SFH 4231
Page / Seite: 142

MIDLED
SFH 4600
Page / Seite: 142

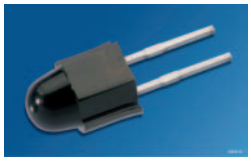
MIDLED
SFH 4605
Page / Seite: 142



SMR
SFH 4500
Page / Seite: 148

SIDELED®
SFH 4205
Page / Seite: 144

Mini TOPLED®
SFH 4203
Page / Seite: 144



SMR
SFH 4505
Page / Seite: 148

SFH 4301
Page / Seite: 152

SFH 4501 / SFH 4502 / SFH 4503
Page / Seite: 153

Summary of Types | Typenübersicht

Emitters in plastic package | Emitter im Plastikgehäuse

IRL 80 A / IRL 81 A
Page / Seite: 155

SFH 4110
Page / Seite: 155

SFH 484 / SFH 485 / SFH 486 / SFH 4550
Page / Seite: 153

LD 274
Page / Seite: 154

LD 271
Page / Seite: 154

SFH 415 / SFH 4501 / SFH 4502 / SFH 4503 / SFH 4511 / SFH 4556
Page / Seite: 154

SFH 487
Page / Seite: 153

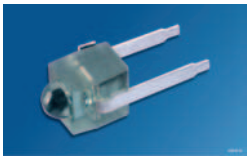
SFH 409
Page / Seite: 154

SFH 485 P
Page / Seite: 154

SFH 487 P
Page / Seite: 154

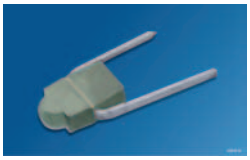
SFH 4301
Page / Seite: 152

SFH 4350
Page / Seite: 151



LD 261
Page / Seite: 155

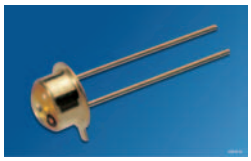
LD 263
Page / Seite: 155



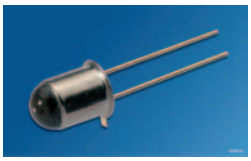
SFH 405
Page / Seite: 155

Summary of Types | Typenübersicht

Emitters in metal package | Emitter im Metallgehäuse

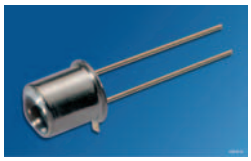


SFH 464 / SFH 483 / LD 242 / SFH 4850
Page / Seite: 156

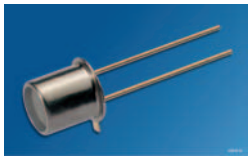


SFH 400 / SFH 480
Page / Seite: 157

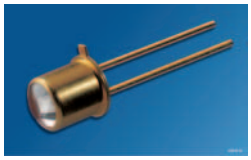
SFH 4860
Page / Seite: 156



SFH 401
Page / Seite: 157



SFH 482
Page / Seite: 156



SFH 4881 / SFH 4811
Page / Seite: 156

SFH 4883 / SFH 4813
Page / Seite: 156

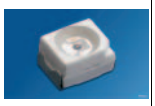
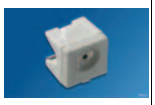
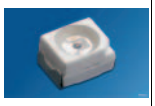
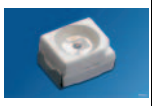
SMT Emitters | SMT Emitter

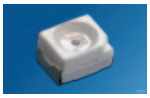
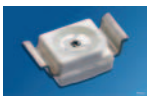
Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	Φ_e typ [mW]	Measurement cond.	V_F [V]	Measurement cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
Golden DRAGON®										
 **Golden DRAGON®**	SFH 4230	850	± 60	440	I_F = 1 A, t_p = 100 µs	1.8 (≤ 2.4)	I_F = 1 A, t_p = 100 µs	10	Q65110A4023	92
 **Golden DRAGON®**	SFH 4231	940	± 60	500	I_F = 1 A, t_p = 100 µs	1.8 (≤ 2.4)	I_F = 1 A, t_p = 100 µs	20	Q65110A4808	92

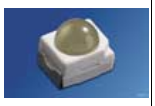
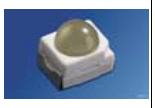
Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measurement cond.	V_F [V]	Measurement cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
MIDLED										
 **MIDLED**	SFH 4600	950	± 20	30 (> 16)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A1575	97
	SFH 4680	880		20 (> 10)				500	Q65110A1570	
	SFH 4650	850		40 (> 16)				12	Q65110A1572	
 **MIDLED**	SFH 4605	950	± 20	30 (> 16)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A1576	97
	SFH 4685	880		20 (> 10)				500	Q65110A1571	
	SFH 4655	850		40 (> 16)				12	Q65110A1569	

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measurement cond.	V_F [V]	Measurement cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
SmartLED®										
 **SmartLED® 0603**	SFH 4010	950	± 80	2.5 (> 1)	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	500	Q65110A6459	51

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
 **SmartLED®**	SFH 4080	880	± 80	2.5 (> 1)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	500	Q65110A6461	51
 **SmartLED® 0603**	SFH 4050	850	± 80	7 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	12	Q65110A6460	51

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
TOPLED®/SIDELED® Family | TOPLED®/SIDELED® Familie										
 **TOPLED®**	SFH 420	950	± 60	5 (> 2.5)	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	500	Q65110A2473	79
 **SIDELED®**	SFH 425	950	± 60	5 (> 2.5)	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	500	Q65110A2463	71
 **TOPLED®**	SFH 421	880	± 60	7 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	500	Q65110A1218	79
 **SIDELED®**	SFH 426	880	± 60	7 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	500	Q65110A2512	71
 **TOPLED®**	SFH 4252	850	± 60	16 (> 10)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2468	79
 **TOPLED®**	SFH 4200	950	± 60	10 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2494	79

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
 **SIDELED®**	SFH 4205	950	± 60	10 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2498	71
 **SIDELED®**	SFH 4255	850	± 60	15 (> 10)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2467	71
 **TOPLED®**	SFH 4211	950	± 60	6 (> 2.5)	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	500	Q65110A2515	79
 **TOPLED® RG**	SFH 4281	880	± 60	4 ... 12.5	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	500	Q65110A2516	70
 **Mini TOPLED®**	SFH 4203	950	± 65	8 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2499	50
 **Power TOPLED®**	SFH 4250	850	± 60	15 (> 10)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2465	72
 **TOPLED®**	SFH 4257	850	± 60	7 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2466	80
	SFH 4271	880		2 (> 1)		1.5 (≤ 1.8)		500	Q65110A2521	
	SFH 4272	645		0.35 (> 0.16)	I_F = 20 mA, t_p = 20 ms	2 (≤ 2.5)	I_F = 20 mA, t_p = 20 ms		Q65110A2522	79
	SFH 4273	660		1 (> 0.63)	I_F = 50 mA, t_p = 20 ms	2.1 (≤ 2.8)	I_F = 50 mA, t_P = 20 ms	100	Q65110A2523	

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
TOPLED®/SIDELED® Family | TOPLED®/SIDELED® Familie										
 **TOPLED® with Lens**	SFH 4209	950	± 25	24 (> 10)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2501	49
 **TOPLED® with Lens**	SFH 4289	880	± 25	17 (> 6.3)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	500	Q65110A2519	49
 **Power TOPLED® w. Lens**	SFH 4259	850	± 25	55 (> 25)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2464	73
 **Power TOPLED® w. Lens**	SFH 4258	850	± 15	90 (> 40)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2975	85

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
TOPLED®/SIDELED® Family | TOPLED®/SIDELED® Familie										
	SFH 425	950	± 60	5 (> 2.5)	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	500	Q65110A2463	71
	SFH 4205			10 (> 4)		1.5 (≤ 1.8)		10	Q65110A2498	
	SFH 426	880		7 (> 4)				500	Q65110A2512	
SIDELED®	SFH 4255	850		15 (> 10)		1.5 (≤ 1.9)		12	Q65110A2467	

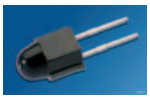
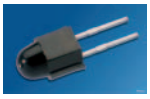
Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
2 Emitters in Multi TOPLED® Package | 2 Sender in Multi TOPLED® Package										
 **Multi TOPLED®**	SFH 7222	880 565	± 60	> 4	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8) 2.0 (≤ 2.6)	I_F = 100 mA, t_p = 20 ms I_F = 10 mA, t_p = 20 ms	500 450	Q65110A2742	54

Package Gehäuse	Type Bezeichnung	Emitter Sender						Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
		λ_{peak} typ [nm]	Half angle φ [°]	I_V [mcd]	Measure-ment cond.	V_F [V]	Measure-ment cond.		
Detector/Emitter in Multi TOPLED® package | Empfänger/Sender im Multi TOPLED® Gehäuse									
 **Multi TOPLED®**	SFH 331-JK	635	± 60	6 (4 ... 12.5)	I_F = 10 mA	2 (≤ 2.6)	I_F = 10 mA	Q65110A2821	5

Detector Empfänger					
Radiant sensitive area typ. [mm^2]	I_{PCE} [µA]	Measure-ment cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]
0.038	≥ 16	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	380 ... 1150	7

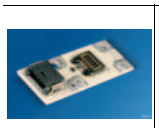
Package Gehäuse	Type Bezeichnung	Emitter Sender						Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
		λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measurement cond.	V_F [V]	Measurement cond.		
Detector/Emitter in Multi TOPLED® package | Empfänger/Sender im Multi TOPLED® Gehäuse									
 **Multi TOPLED®**	SFH 7221	880	± 60	> 4	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	Q65110A2741	6
		Detector Empfänger							
		Radiant sensitive area typ. [mm^2]	I_{PCE} [µA]	Measurement cond.	V_{CE} max. [V]	$\lambda_{10\%}$ typ. [nm]	t_r, t_f typ [µs]		
		0.038	≥ 16	λ = 880 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	380 ... 1150	7		

Package Gehäuse	Type Bezeichnung	Emitter Sender						Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
		λ_{peak} typ [nm]	Half angle φ [°]	I_V [mcd]	Measurement cond.	V_F [V]	Measurement cond.		
Detector/Emitter in Multi TOPLED® package | Empfänger/Sender im Multi TOPLED® Gehäuse									
 **Multi TOPLED®**	SFH 7225	591	± 60	63 ... 200	I_F = 20 mA	2	I_F = 20 mA, t_p = 20 ms	Q65110A2743	5
		Detector Empfänger							
		Radiant sensitive area typ. [mm^2]	I_{PCE} typ [µA]	Measurement cond.	V_{CE} max. [V]	Crosstalk $I_{PCE, typ}$ [mA]	Measurement Conditions		
		0.038	650	Std. Light A, E_v = 1000 lx, V_{CE} = 5V	35	0.5 ... 5	I_F = 20 mA, V_{CE} = 5 V		

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
SMR										
 **T1 3/4 SMR**	SFH 4500	950	± 10	85 (> 25)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2642	52
 **T1 3/4 SMR**	SFH 4510	950	± 14	50 (> 25)	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	500	Q65110A2630	7
 **T1 3/4 SMR**	SFH 4505	950	± 10	85 (> 25)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2643	53
 **T1 3/4 SMR**	SFH 4515	950	± 14	50 (> 25)	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	500	Q65110A2633	8
 **T1 3/4 SMR**	SFH 4580	880	± 15	55 (> 25)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q65110A2632	52
 **T1 3/4 SMR**	SFH 4585	880	± 15	55 (> 25)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q65110A2631	53

High power emitters for illumination | Hochleistungsemitter für Beleuchtung

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	Φ_e typ [mW]	Measurement cond.	V_F [V]	Measurement cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
 **Golden DRAGON®**	SFH 4230	850	± 60	440	I_F = 1 A, t_p = 100 µs	1.8 (≤ 2.4)	I_F = 1 A, t_p = 100 µs	10	Q65110A4023	92
 **Golden DRAGON®**	SFH 4231	940	± 60	500	I_F = 1 A, t_p = 100 µs	1.8 (≤ 2.4)	I_F = 1 A, t_p = 100 µs	20	Q65110A4808	92

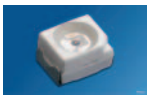
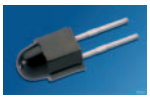
Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e typ [mW / sr]	Measurement cond.	V_F [V]	Measurement cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
 **OSTAR® Observation**	SFH 4730	850	± 60	1000	I_F = 1A, t_p = 20 ms	18 (≤ 24)	I_F = 1 A, t_p = 100 µs	10	Q65110A5452	99
 **OSTAR® Observation**	SFH 4740	850	± 60	1200	I_F =1A, t_p = 20 ms	18 (≤ 24)	I_F = 1 A, t_p = 100 µs	10	Q65110A6190	99

High power emitters 850 nm | Hochleistungsemitter 850 nm

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measurement cond.	V_F [V]	Measurement cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
 **SmartLED® 0603**	SFH 4050	850	± 80	7 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A6460	51
 **Golden DRAGON®**	SFH 4230	850	± 60	170	I_F = 1 A, t_p = 100 µs	1.8 (≤ 2.4)	I_F = 1 A, t_p = 100 µs	10	Q65110A4023	92
 **Power TOPLED®**	SFH 4250	850	± 60	15 (> 10)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2465	72
 **TOPLED®**	SFH 4257	850	± 60	7 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2466	80
 **Power TOPLED® w. Lens**	SFH 4259	850	± 25	55 (> 25)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2464	73
 **Power TOPLED® w. Lens**	SFH 4258	850	± 15	90 (> 40)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2975	85
 **SIDELED®**	SFH 4255	850	± 60	15 (> 10)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2467	71
 **MIDLED**	SFH 4650	850	± 20	40 (> 16)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A1572	97

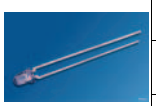
Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
 **MIDLED**	SFH 4655	850	± 20	40 (> 16)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A1569	97
 **T 1 3/4**	SFH 4550	850	± 3	700 (> 400)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A1772	60
 **T 1 3/4**	SFH 4556	850	± 20	130 (> 40)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A6087	100
 **T 1**	SFH 4350	850	± 13	70 (> 40)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2091	86
 **TO 18**	SFH 4850 E7800	850	± 23	7 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2093	34

High speed emitters 950 nm | Sehr schnelle Emitter 950 nm

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measurement cond.	V_F [V]	Measurement cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeichnung
 **TOPLED®**	SFH 4200	950	± 60	10 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2494	79
 **TOPLED® with Lens**	SFH 4209	950	± 25	24 (> 10)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2501	49
 **SIDELED®**	SFH 4205	950	± 60	10 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2498	71
 **MIDLED**	SFH 4600	950	± 20	30 (> 16)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A1575	97
 **MIDLED**	SFH 4605	950	± 20	30 (> 16)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A1576	97
 **Mini TOPLED®**	SFH 4203	950	± 65	8 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2499	50
 **T1 3/4 SMR**	SFH 4500	950	± 10	85 (> 25)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2642	52
 **T1 3/4 SMR**	SFH 4505	950	± 10	85 (> 25)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q65110A2643	53
 **T 1**	SFH 4301	950	± 10	75 (> 16)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q62702P5166	55

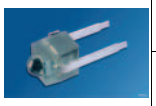
Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
 T 1 3/4	SFH 4501	950	± 7	110 (> 63)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q62702P5061	56
	SFH 4502		± 18	60 (> 25)					Q62702P5062	57
	SFH 4503		± 4	250 (> 63)					Q62702P5305	58

Emitters in plastic package | Emitter im Plastikgehäuse

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
Radial packages | Radiale Gehäuse										
 T 1 3/4	SFH 4550	850	± 3	700 (> 400)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A1772	60
 T 1 3/4	SFH 4556	850	± 20	130 (> 40)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A6087	100
 T 1	SFH 4350	850	± 13	70 (> 40)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.9)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2091	86
 T 1 3/4	SFH 484	880	± 8	> 50	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q62703Q1092	60
	SFH 484-2			> 80					Q62703Q1756	
 T 1 3/4	SFH 486	880	± 11	> 40	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q62703Q1094	62
 T 1 3/4	SFH 485	880	± 20	25 ... 160	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q62703Q1093	61
	SFH 485-2			25 ... 100					Q62703Q1547	
 T 1	SFH 487	880	± 20	> 12.5	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q62703Q1095	55
	SFH 487-2			20 ... 80					Q62703Q2174	
	SFH 487-3			32 ... 125					Q62703Q2175	

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
 **T 1 3/4**	SFH 485 P	880	± 40	> 3.15	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q62703Q0516	63
 **T 1**	SFH 487 P	880	± 65	> 2	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q62703Q0517	64
 **T 1 3/4**	LD 274	950	± 10	> 50	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	500	Q62703Q1031	65
	LD 274-3			> 80					Q62703Q1820	
 **T 1**	SFH 4301	950	± 10	75 (> 16)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q62702P5166	55
 **T 1 3/4**	SFH 4501	950	± 7	110 (> 63)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	10	Q62702P5061	56
	SFH 4502		± 18	60 (> 25)					Q62702P5062	57
	SFH 4503		± 4	250 (> 63)					Q62702P5305	58
 **T 1 3/4**	LD 271	950	± 25	15 (> 10)	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	1000	Q62703Q0148	93
	LD 271-H			> 16					Q62703Q0256	
 **T 1 3/4**	LD 271 L	950	± 25	15 (> 10)	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	1000	Q62703Q0833	36
	LD 271 L-H			> 16					Q62703Q0838	
 **T 1 3/4**	SFH 415	950	± 17	> 25	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	500	Q62702P0296	36
	SFH 415 U			> 40					Q62702P1137	
 **T 1 3/4**	SFH 4511	950	± 4	150 (> 63)	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	500	Q62702P5557	87
 **T 1**	SFH 409	950	± 20	> 6.3	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	500	Q62702P0860	88
	SFH 409-2			> 10					Q62702P1002	

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
Sidelooker										
	IRL 81A	880	± 25	> 1	I_F = 20 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q68000A8000	59
	IRL 80A	950	± 30	> 0.4	I_F = 20 mA, t_p = 20 ms	1.2 (≤ 1.5)	I_F = 20 mA	1000	Q68000A7851	59
	SFH 4110	950	± 9	> 2.5	I_F = 20 mA, t_p = 20 ms	1.2 (≤ 1.4)	I_F = 20 mA, t_P = 20 ms	450	Q62702P5072	29

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
Arrays in plastic package | Zeilen im Plastikgehäuse										
	LD 261	950	± 15	2 ... 10	I_F = 50 mA, t_p = 20 ms	1.25 (≤ 1.4)	I_F = 50 mA, t_P = 20 ms	1000	Q62703Q0395	32
	LD 261-5/6			3.2 ... 10					Q65110A3337	
 **Array**	LD 262	950	± 15	5 (2 ... 6.3)	I_F = 50 mA, t_p = 20 ms	1.25 (≤ 1.4)	I_F = 50 mA, t_P = 20 ms	1000	Q62703Q0070	33
	LD 263								Q62703Q0071	
	LD 264								Q62703Q0072	
	LD 265								Q62703Q0073	
	LD 266								Q62703Q0074	
	LD 267								Q62703Q0075	
	LD 268								Q62703Q0076	
	LD 269								Q62703Q0077	
	LD 260								Q62703Q0078	
	SFH 405	950	± 16	2.5 (> 1.6)	I_F = 40 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	1000	Q62702P0835	31

Emitters in metal package | Emitter im Metallgehäuse

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
 **TO 18**	SFH 464 E7800	660	± 23	> 1	I_F = 50 mA, t_p = 20 ms	2.1 (≤ 2.8)	I_F = 50 mA, t_P = 20 ms	100	Q62702P1745	34
 **TO 18**	SFH 4860	660	± 50	> 0.63	I_F = 50 mA, t_p = 20 ms	2.1 (≤ 2.8)	I_F = 50 mA, t_P = 20 ms	100	Q62702P5053	66
 **TO 18**	SFH 4850 E7800	850	± 23	7 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	12	Q65110A2093	34
 **TO 18**	SFH 480 SFH 480-2/3	880	± 6	> 40	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q62703Q1087 Q62702P5195	42
 **TO 18**	SFH 483 L/M E7800	880	± 23	2 (1 ... 3.2)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q62703Q4755	34
 **TO 18**	SFH 482 SFH 482-1/2 SFH 482-2/3 SFH 482 M E7800	880	± 30	> 3.15 3.15 ... 10 > 5 1.6 ... 3.2	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	600	Q62703Q1089 Q62703Q4771 Q62703Q4754 Q62703Q2186	43
 **TO 46**	SFH 4881	880	± 5	72 (> 40)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	500	Q62702P5302	74
 **TO 46**	SFH 4883	880	± 35	8 (> 4)	I_F = 100 mA, t_p = 20 ms	1.5 (≤ 1.8)	I_F = 100 mA, t_p = 20 ms	500	Q62702P5303	75
 **TO 18**	LD 242 E7800 LD 242-2/3	950	± 40	1 ... 3.2 > 4	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	1000	Q62703Q3509 Q62703Q4749	34

Package Gehäuse	Type Bezeichnung	λ_{peak} typ [nm]	Half angle φ [°]	I_e [mW/sr]	Measure-ment cond.	V_F [V]	Measure-ment cond.	t_r, t_f typ [ns]	Ordering Code Bestellnummer	Package Fig. Bauteilzeich-nung
 **TO 18**	SFH 400	950	± 6	> 20	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	1000	Q62702P0096	42
 **TO 18**	SFH 401	950	± 15	> 10	I_F = 100 mA, t_p = 20 ms	1.3 (≤ 1.5)	I_F = 100 mA, t_p = 20 ms	1000	Q62702P0097	69
	SFH 4811	950	± 5	40 (> 25)	I_F = 100 mA, t_p = 20 ms	≤ 1.5	I_F = 20 mA	1000	Q62702P5300	74
	SFH 4813	950	± 35	4.5 (> 2.5)	I_F = 100 mA, t_p = 20 ms	≤ 1.5	I_F = 20 mA	1000	Q62702P5301	75

Figure 1: SFH 5110

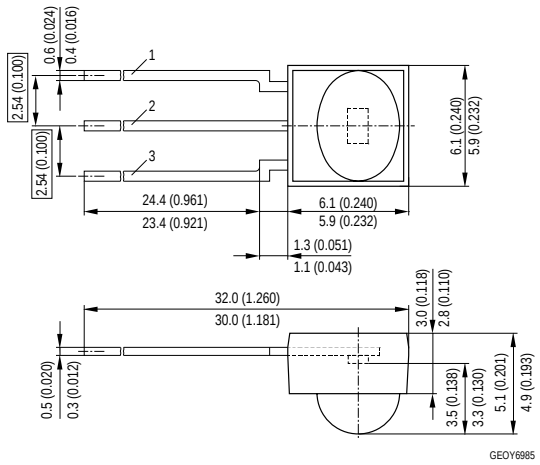


Figure 2: SFH 320, SFH 320 FA

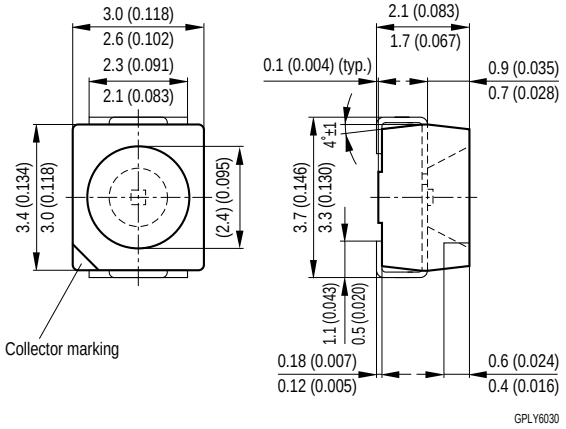


Figure 3: SFH 3211, SFH 3211 FA

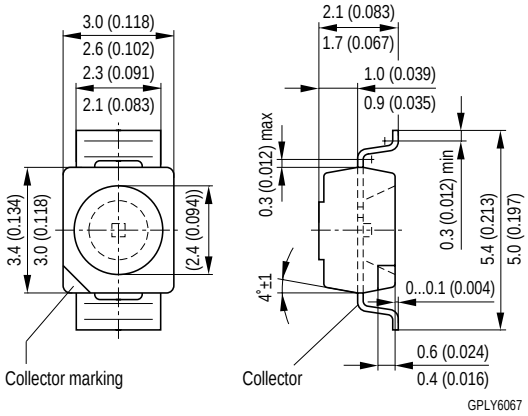


Figure 4: SFH 325, SFH 325 FA,

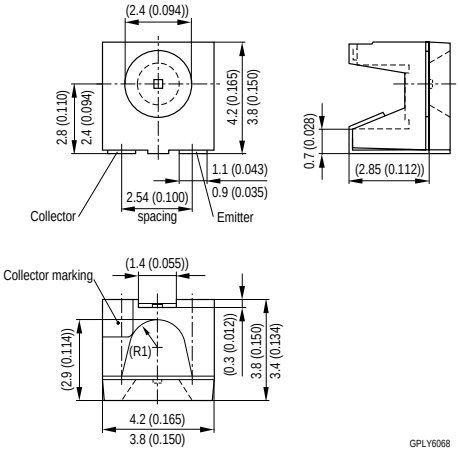


Figure 5: SFH 331, SFH 7225

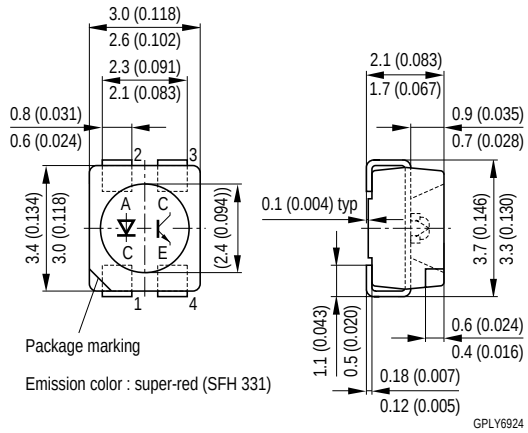


Figure 6: SFH 7221

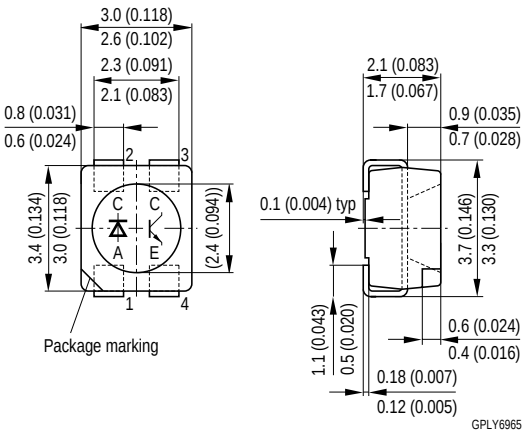


Figure 7: SFH 3500, SFH 3500 FA, SFH 2500 FA, SFH 4510

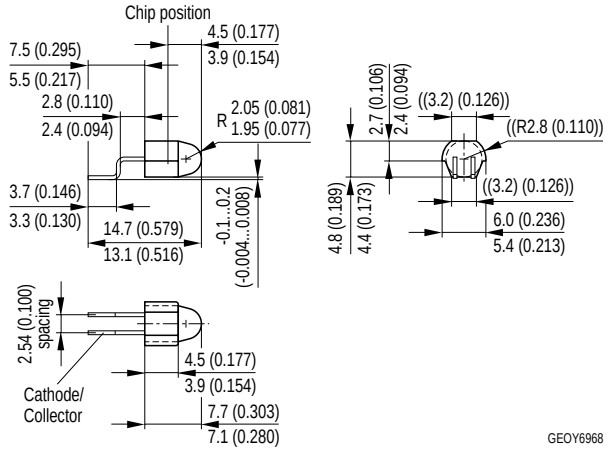


Figure 8: SFH 3505, SFH 3505 FA, SFH 2505, SFH 2505 FA SFH 4515

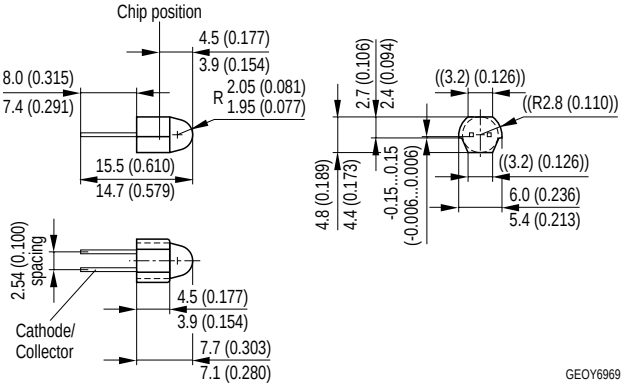


Figure 9: SFH 3400

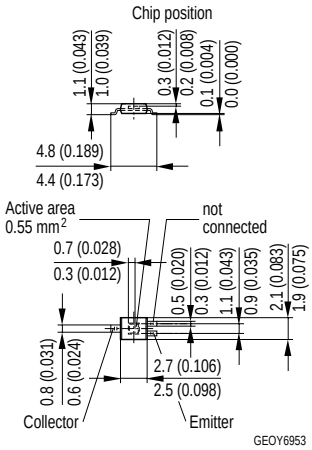


Figure 10: SFH 3401

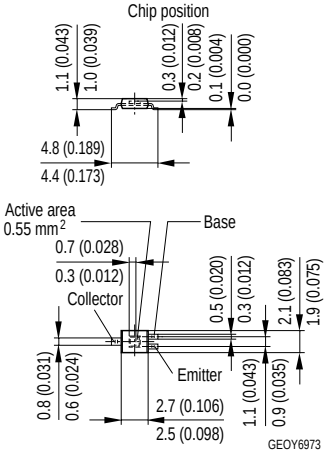


Figure 11: SFH 3201

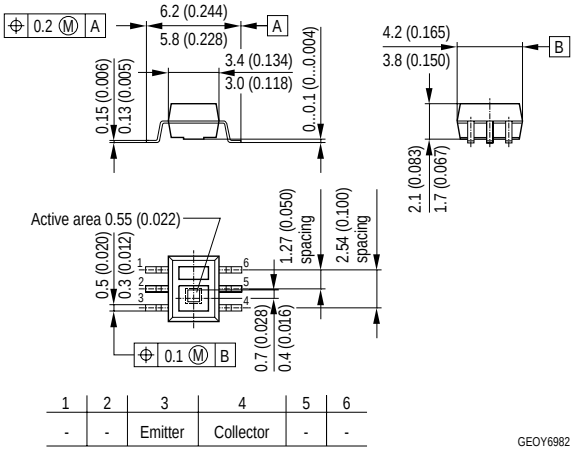


Figure 12: SFH 3410

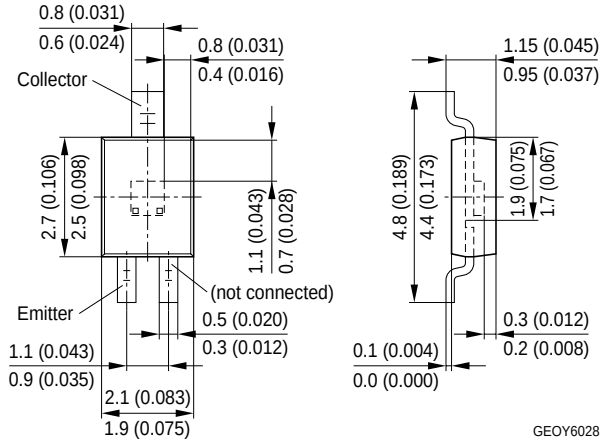


Figure 13: BP 104 FS, BP 104 S, BP 104 FAS

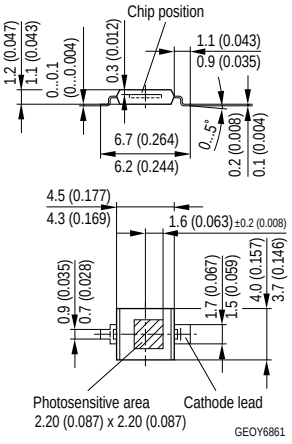


Figure 14: BPW 34 S, BPW 34 FS, BPW 34 FAS, BPW 34 BS

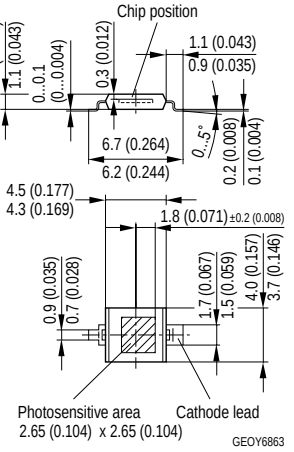


Figure 15: BPW 34 SR, BPW 34 FASR, BPW 34 FSR

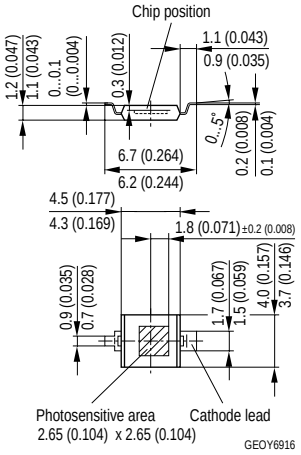


Figure 16: SFH 2400, SFH 2400 FA

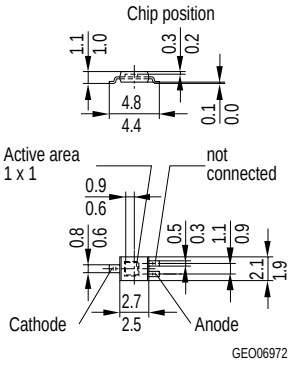


Figure 17: KOM 2125, KOM 2125 FA

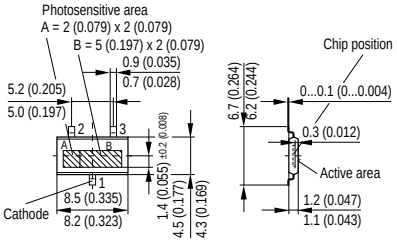


Figure 18: SFH 5440

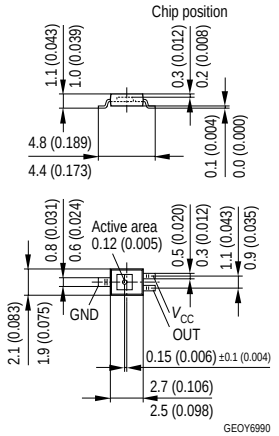


Figure 19: SFH 5140 F

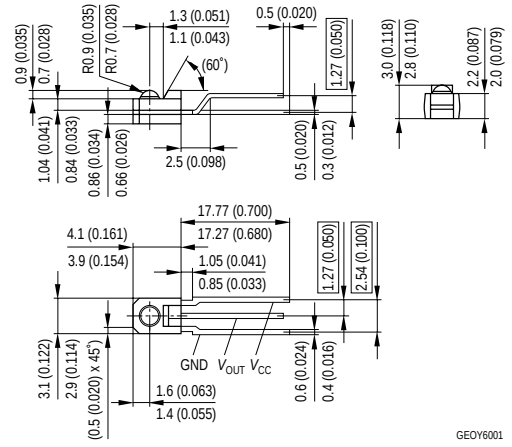


Figure 20: SFH 5840

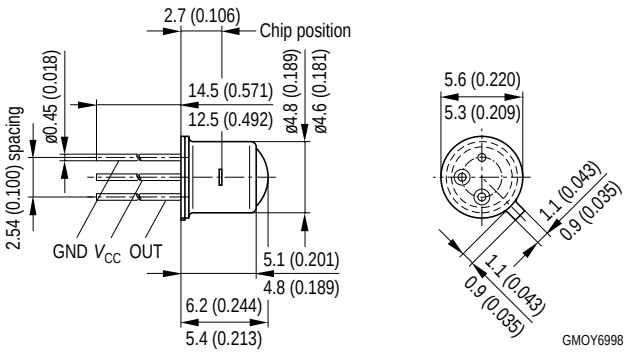


Figure 21: BP 104 FASR

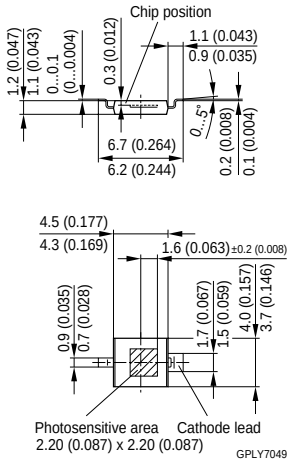


Figure 22: SFH 309, SFH 309 FA, SFH 229, SFH 229 FA

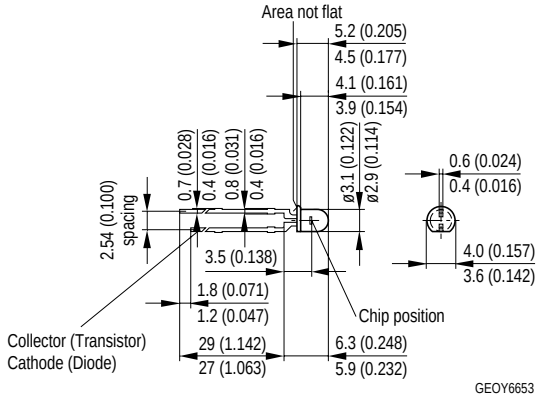


Figure 23: SFH 310, SFH 310 FA

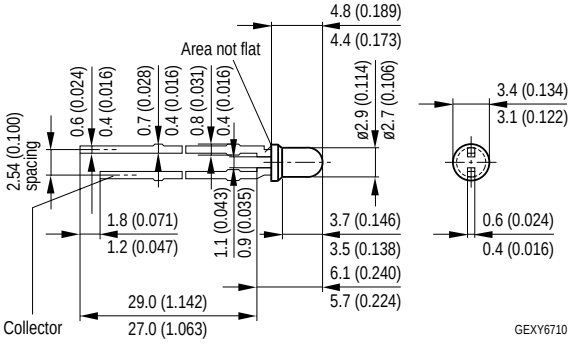


Figure 24: SFH 309 P, SFH 309 PFA

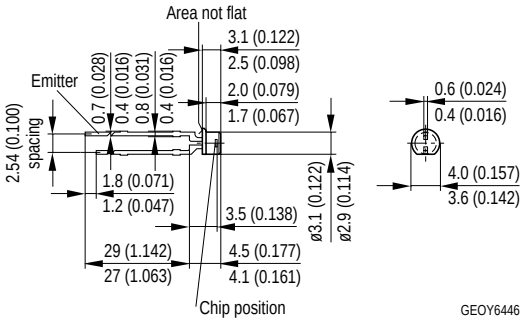


Figure 25: SFH 313, SFH 313 FA SFH 213, SFH 213 FA

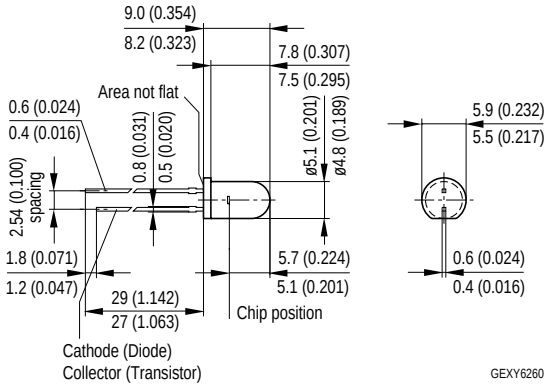


Figure 26: SFH 314, SFH 314 FA

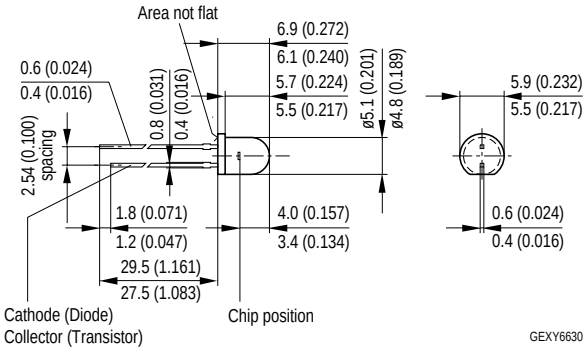


Figure 27: SFH 303, SFH 303 FA

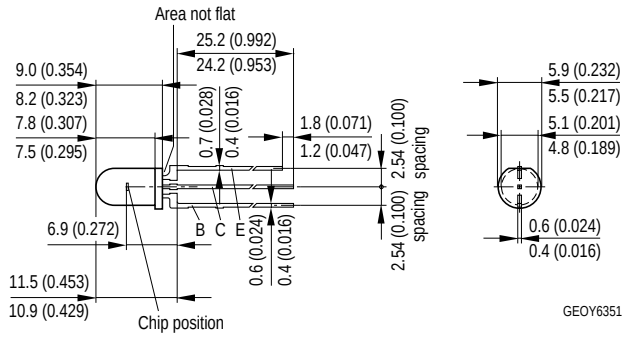


Figure 28: LPT 80 A

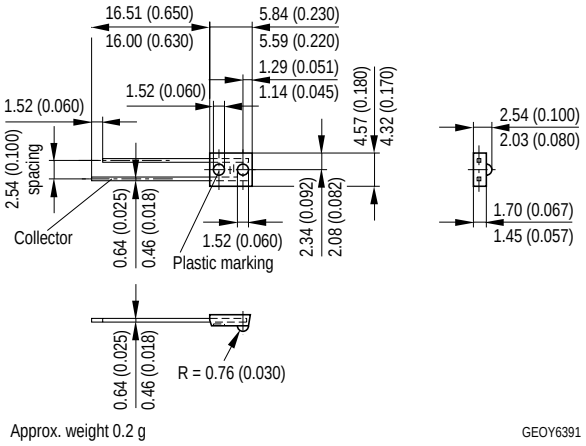


Figure 29: SFH 3100 F, SFH 4110

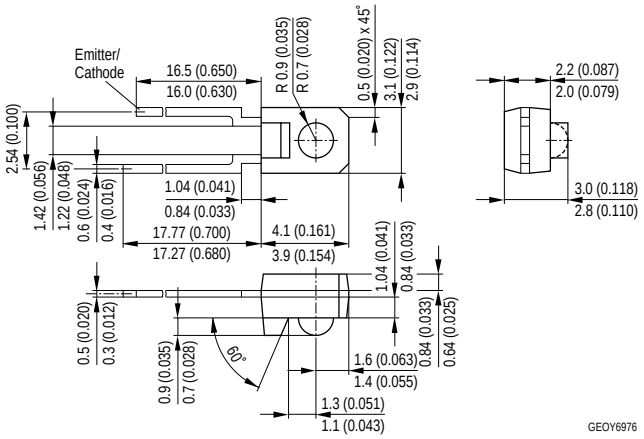


Figure 30: BPX 43, BPY 62

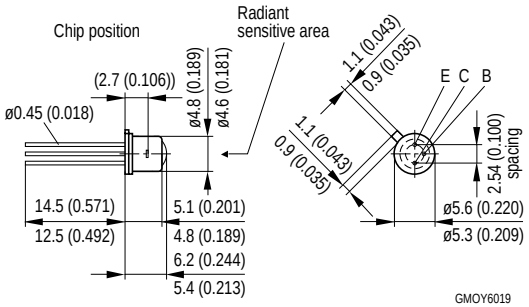


Figure 31: SFH 305, SFH 405

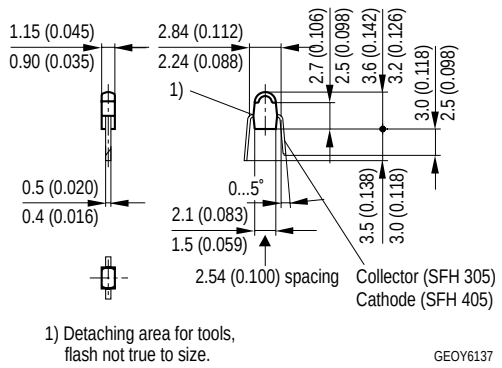


Figure 32: BPX 81, LD 261

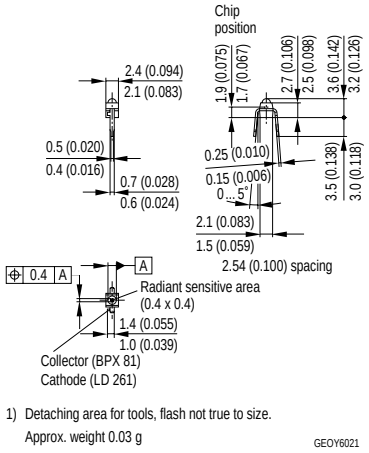


Figure 33: BPX 80, BPX 82-89, LD 260, LD 262-269

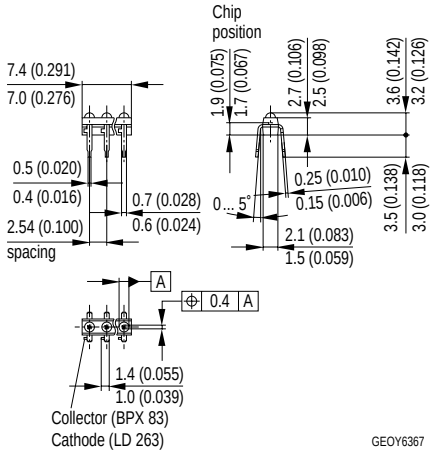


Figure 34: SFH 4850, SFH 464, LD 242, SFH 483

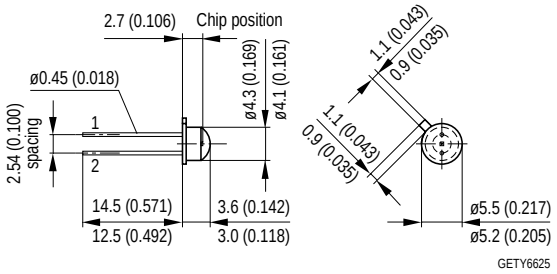


Figure 35: SFH 206 K

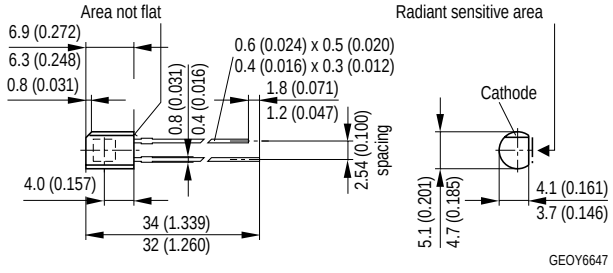


Figure 36: SFH 203, SFH 203 FA, LD 271 L/LH, SFH 415, SFH 4511

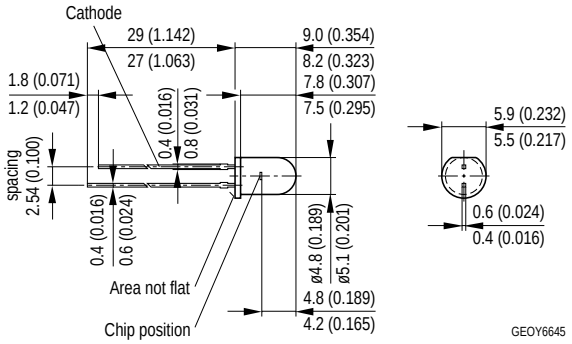


Figure 37: SFH 203 P, SFH 203 PFA

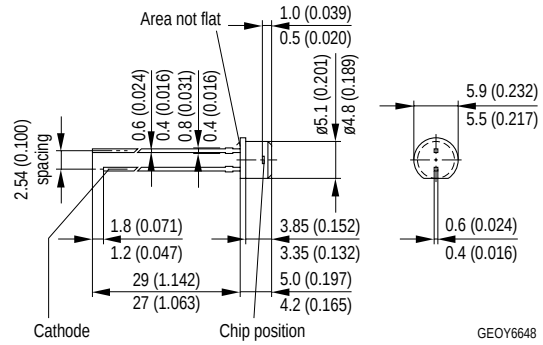


Figure 38: SFH 225 FA, SFH 235 FA

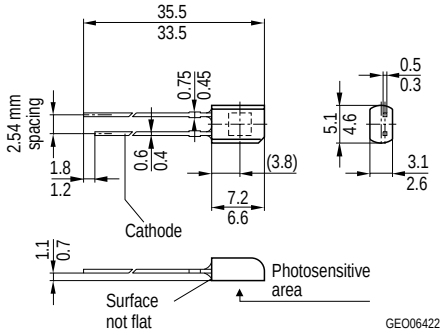


Figure 39: SFH 205 F, SFH 205 FA

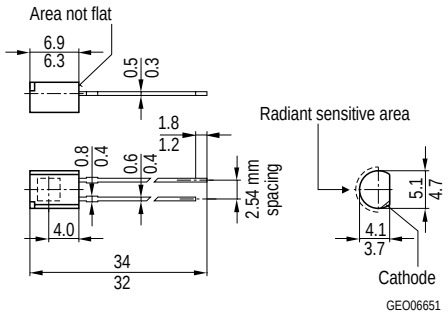


Figure 40: SFH 204 FA

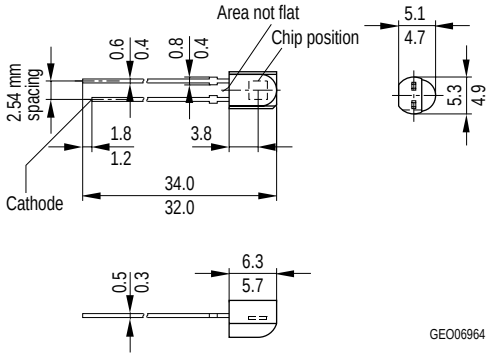


Figure 41: BP 104 F

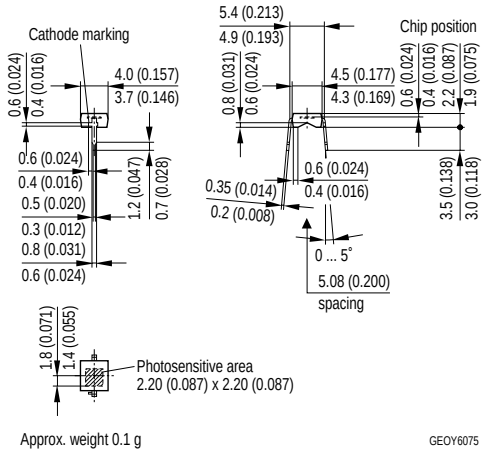


Figure 42: SFH 400, SFH 480

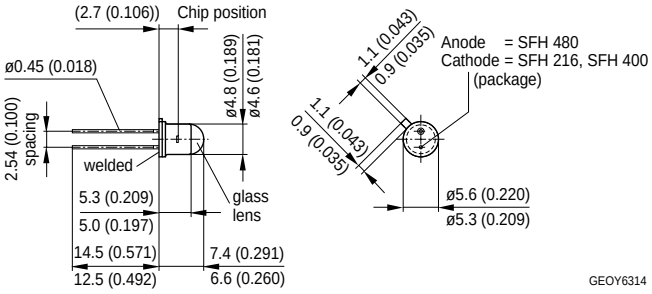


Figure 43: SFH 482, BPX 65

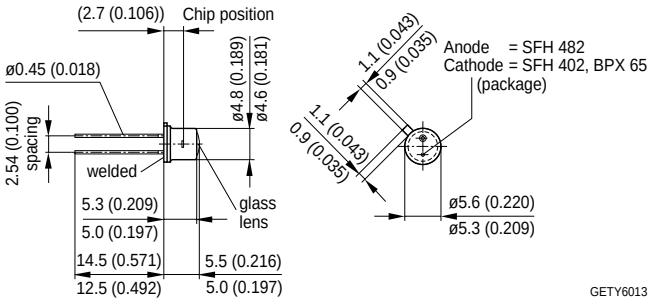


Figure 44: BPW 21, BPX 61

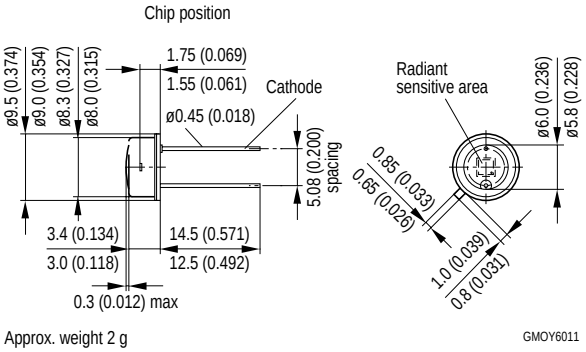


Figure 45: SFH 221

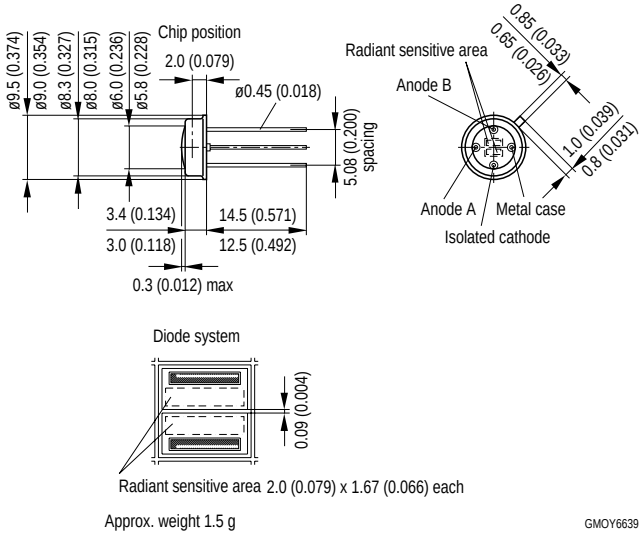


Figure 46: BPX 48

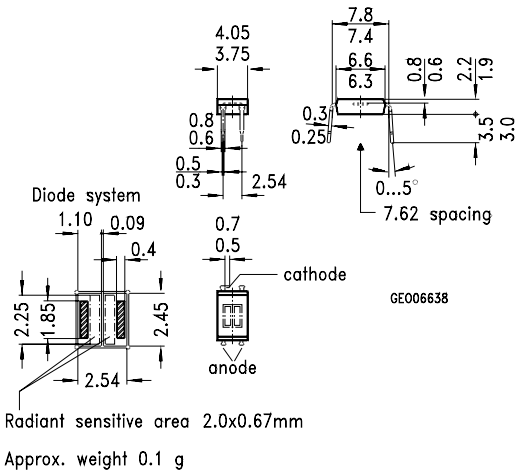


Figure 47: SFH 9315

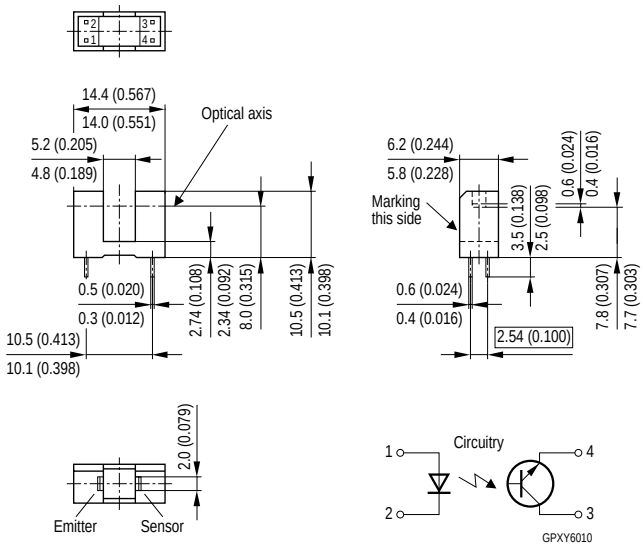


Figure 48: SFH 9201, SFH 9202, SFH 9240

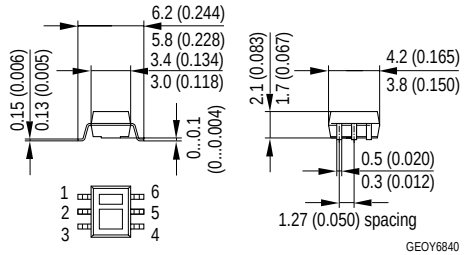


Figure 49: SFH 4209, SFH 4289, SFH 3219

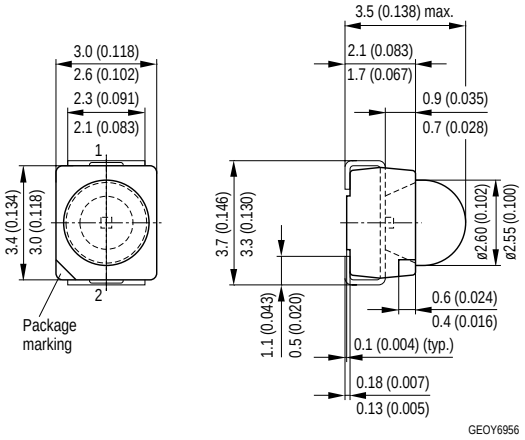


Figure 50: SFH 4203

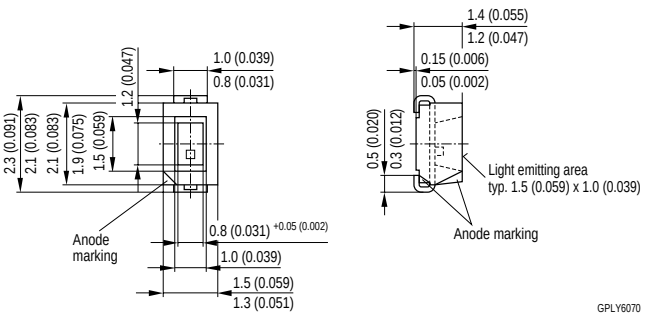


Figure 51: SFH 3010, SFH 4010, SFH 4050, SFH 4080

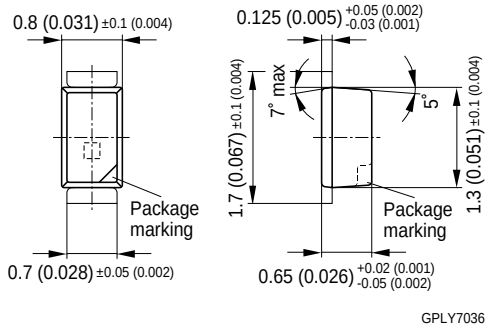


Figure 52: SFH 4580, SFH 4500

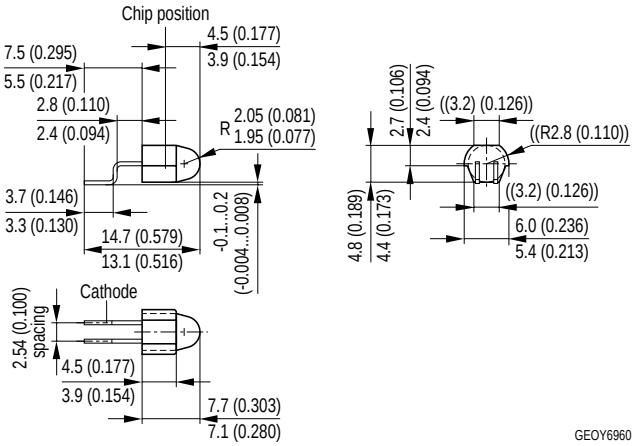


Figure 53: SFH 4585, SFH 4505

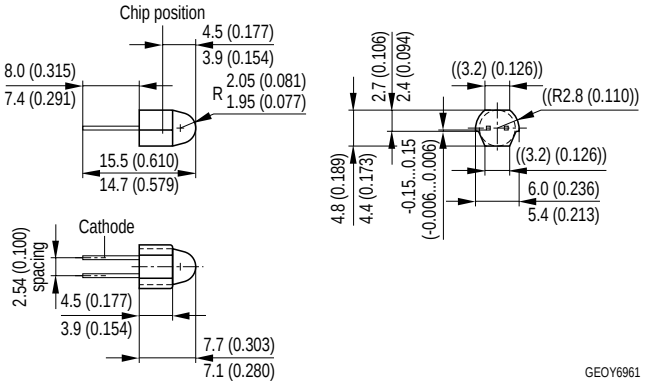


Figure 54: SFH 7222

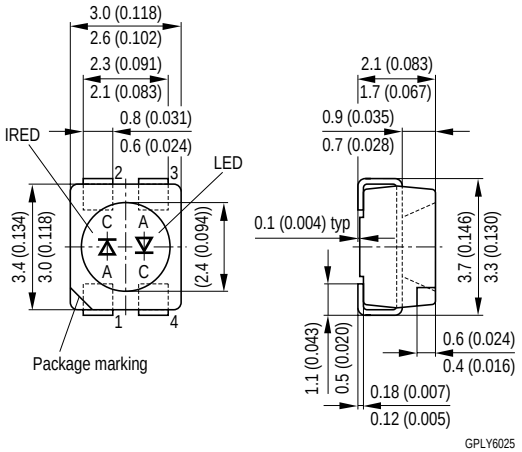


Figure 55: SFH 487, SFH 4301, SFH 409, SFH 4350

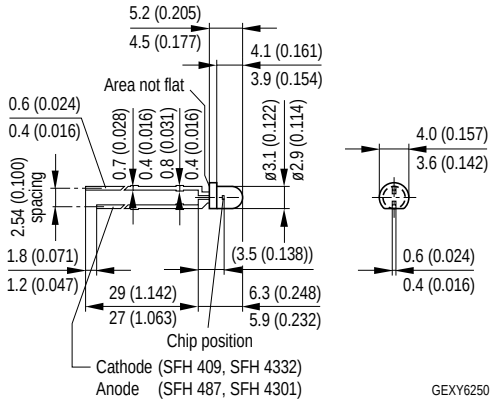


Figure 56: SFH 4501

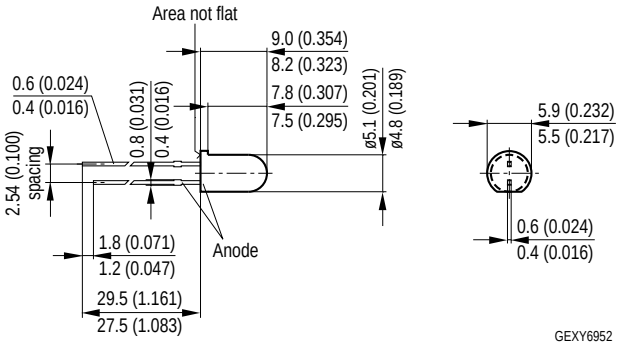


Figure 57: SFH 4502

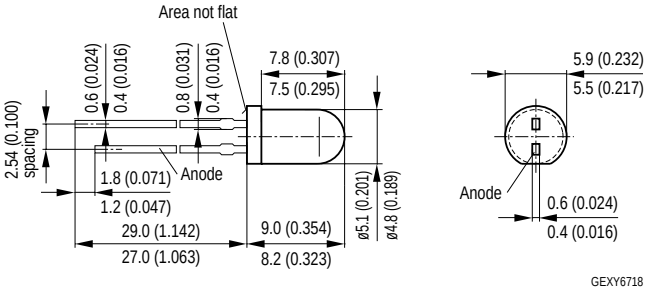


Figure 58: SFH 4503

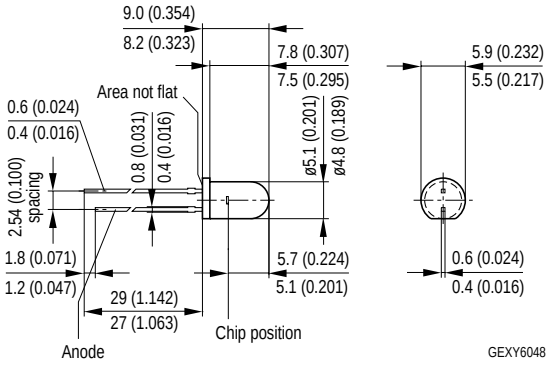


Figure 59: IRL 80 A, IRL 81 A

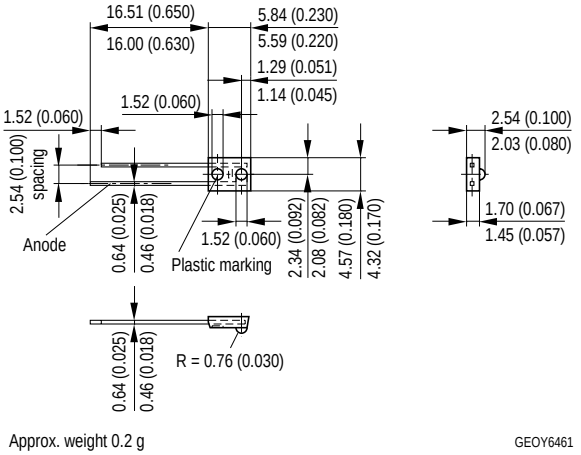


Figure 60: SFH 484, SFH 4550

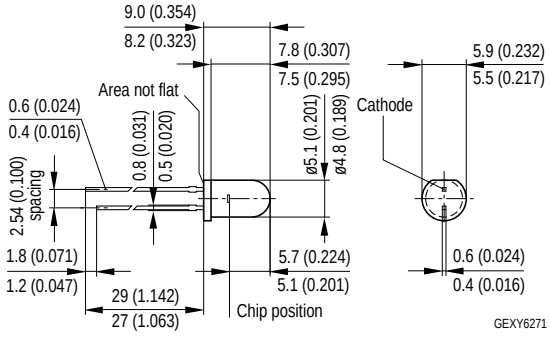


Figure 61: SFH 485

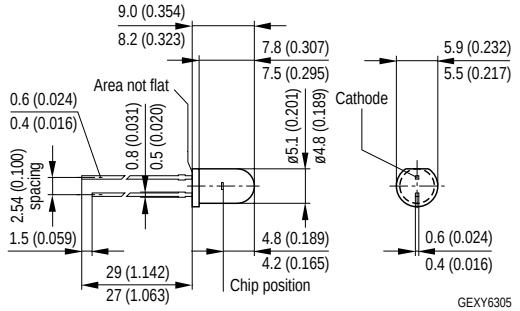


Figure 62: SFH 486

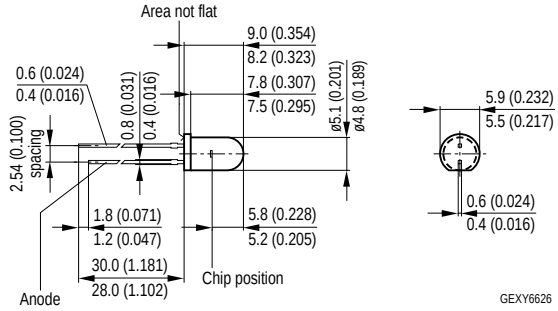


Figure 63: SFH 485 P

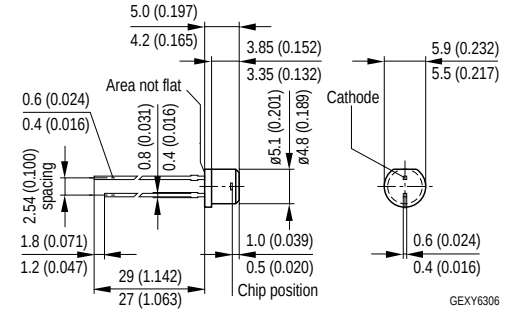


Figure 64: SFH 487 P

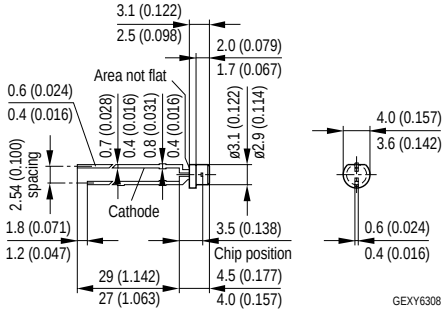


Figure 65: LD 274

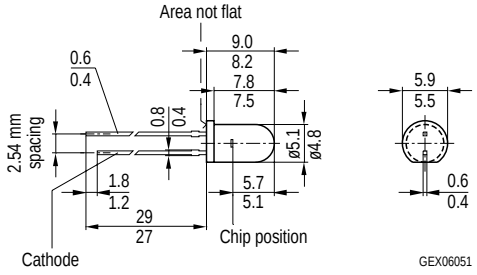


Figure 66: SFH 4860

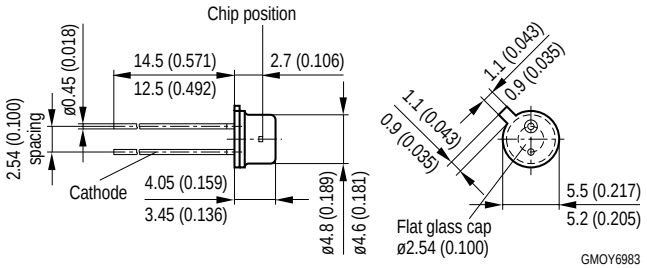


Figure 67: BPX 38

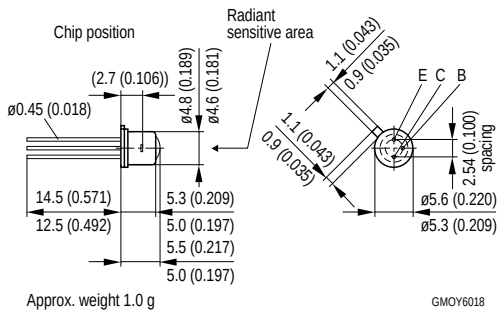


Figure 68: BP 103

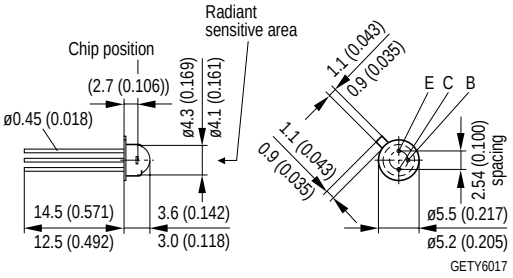


Figure 69: SFH 401

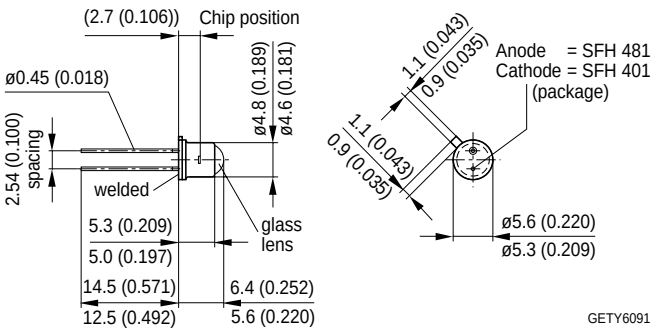


Figure 70: SFH 4281

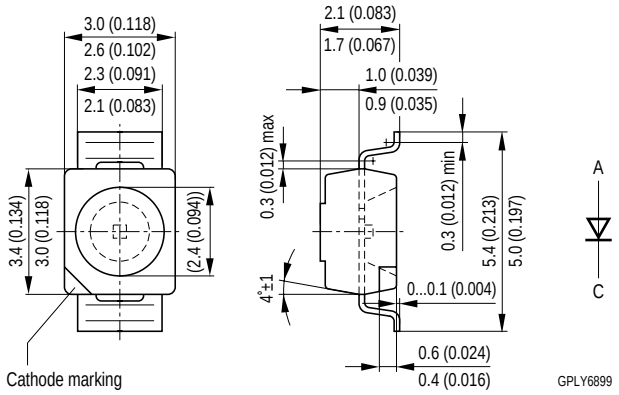


Figure 71: SFH 425, SFH 426, SFH 4205, SFH 4255

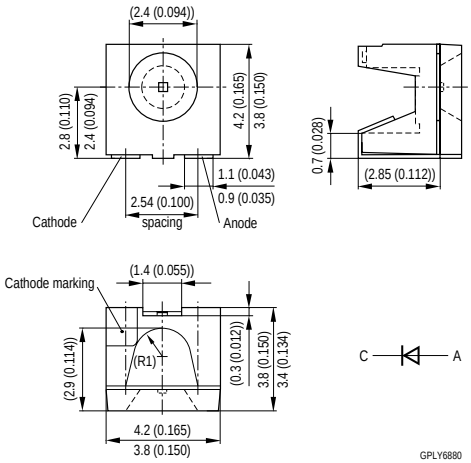


Figure 72: SFH 4250

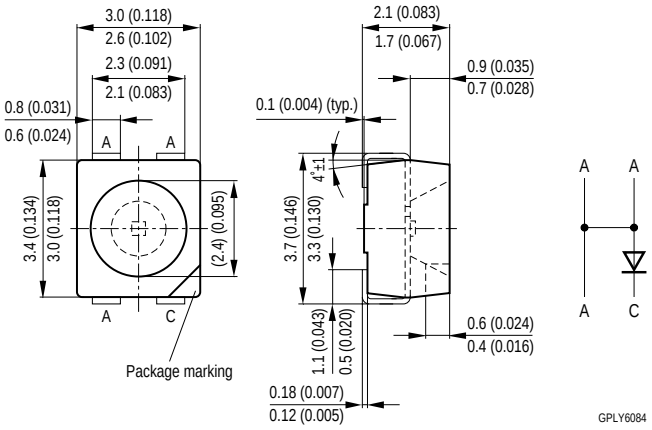


Figure 73: SFH 4259

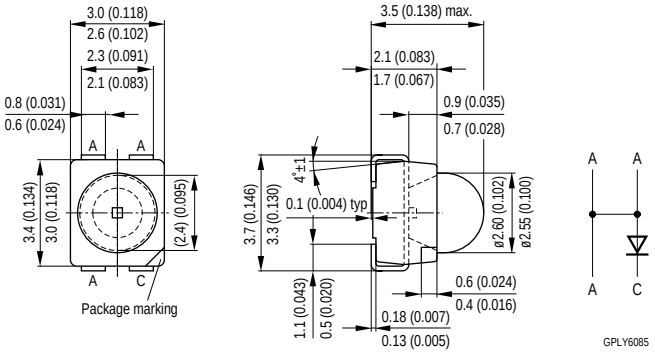


Figure 74: SFH 4881, SFH 4811

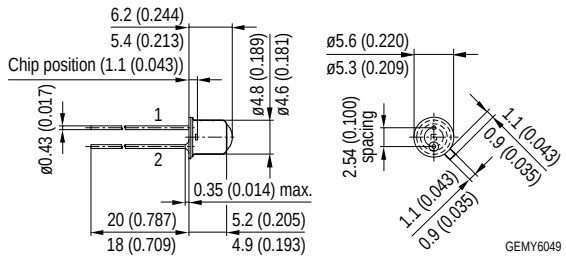


Figure 75: SFH 4883, SFH 4813

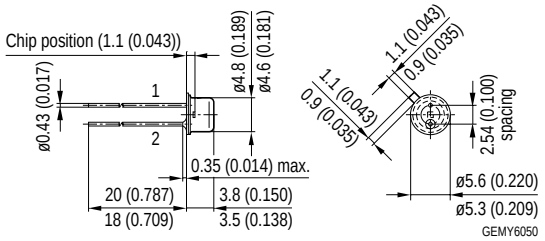


Figure 76: SFH 7740, SFH 7741

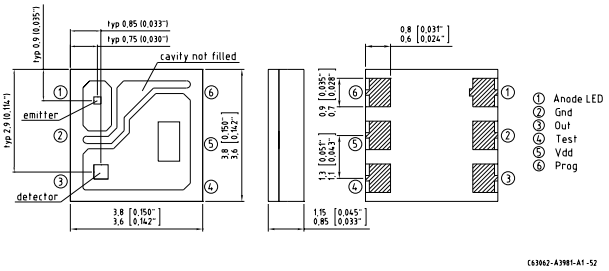


Figure 77: SFH 5130

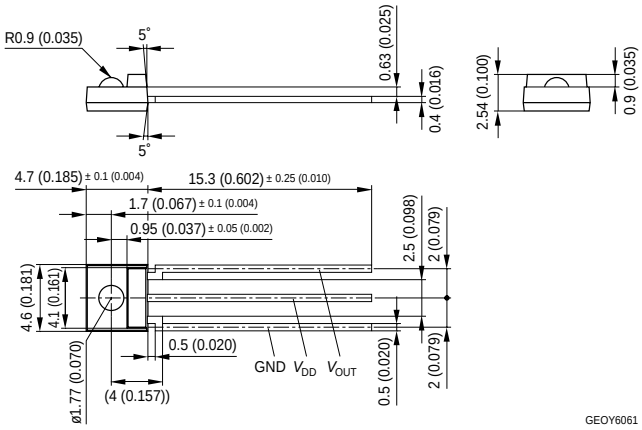


Figure 78: SFH 5410

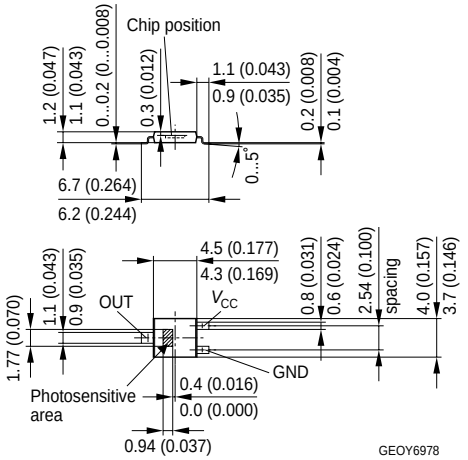


Figure 79: SFH 420, SFH 421, SFH 4200, SFH 4211, SFH 4252, SFH 4272, SFH 4273

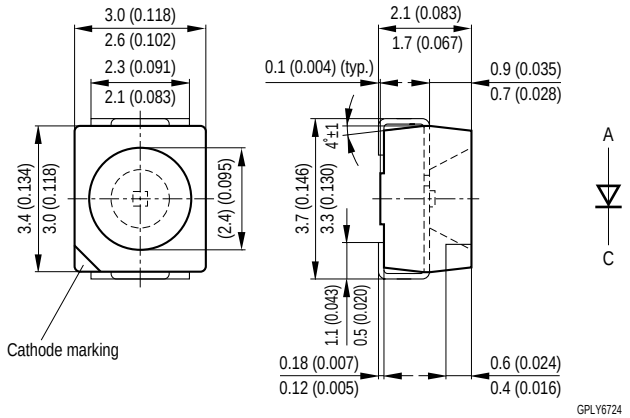


Figure 80: SFH 4271, SFH 4257

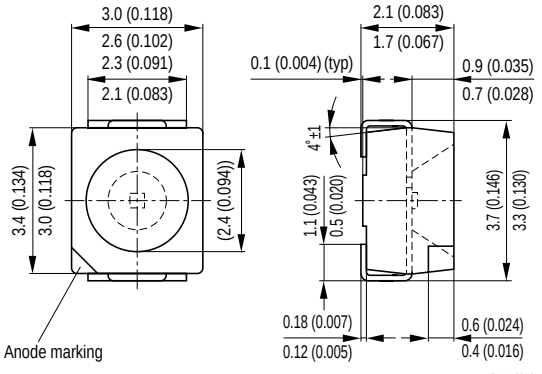


Figure 81: SFH 3204

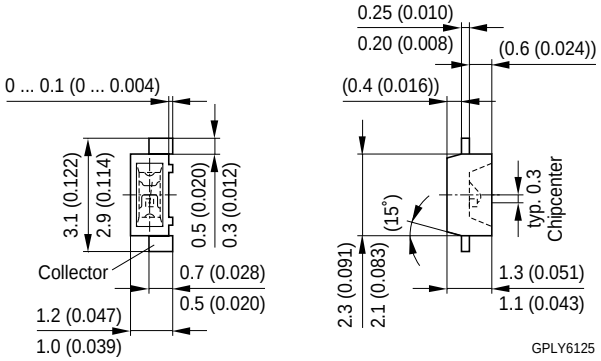


Figure 82: SFH 300, SFH 300 FA

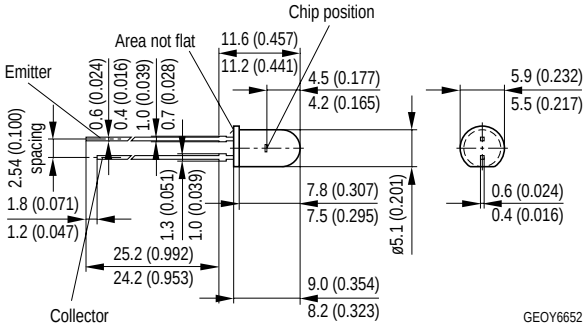


Figure 83: SFH 2430

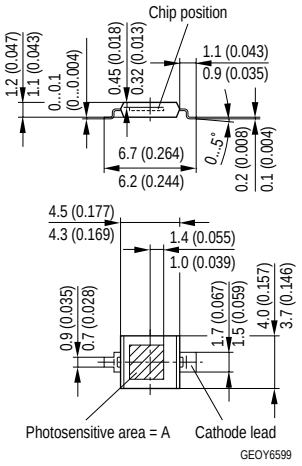


Figure 84: BPW 34, BPW 34 F, BPW 34 B, BPW 34 FA

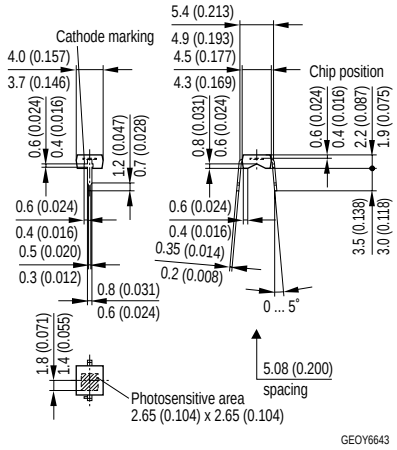


Figure 85: SFH 4258

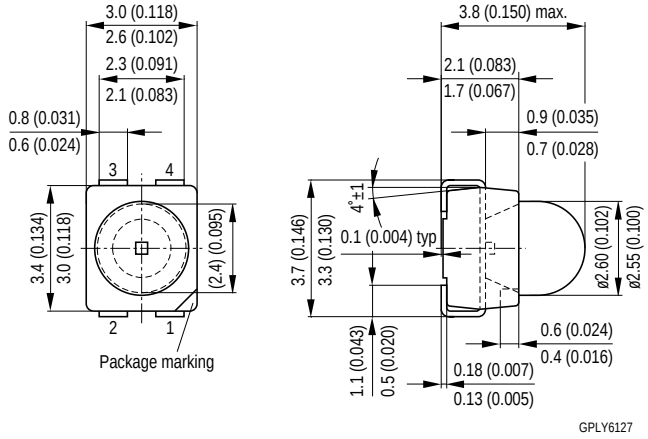


Figure 86: SFH 4350

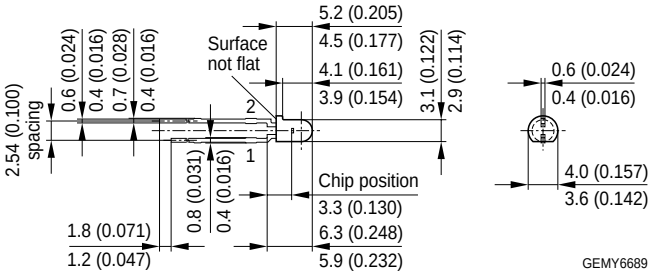


Figure 87: LD 274

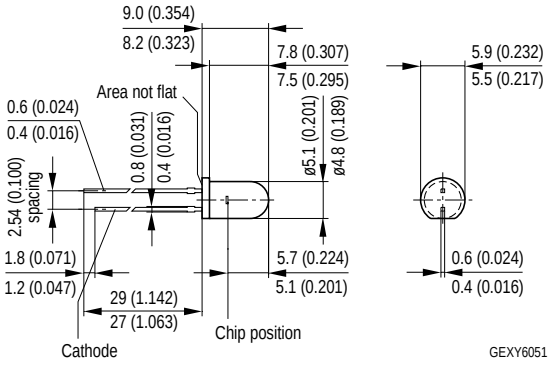


Figure 88: SFH 409

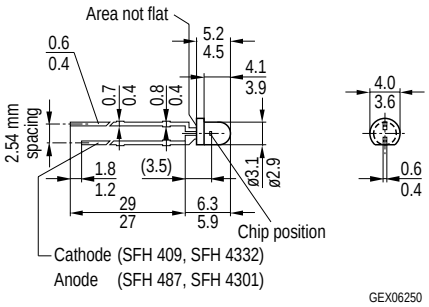


Figure 89: SFH 305, SFH 405

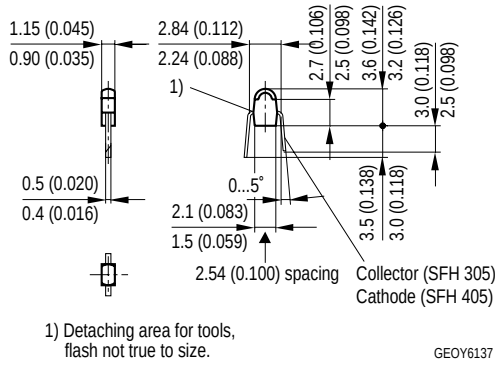


Figure 90: SFH 3710

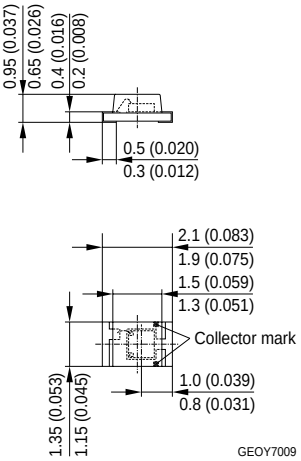


Figure 91: SFH 5711

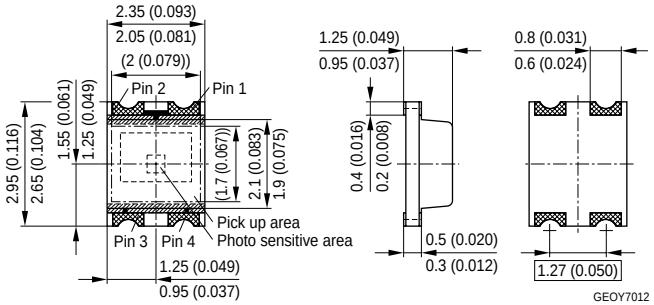


Figure 92: SFH 4230, SFH 4231

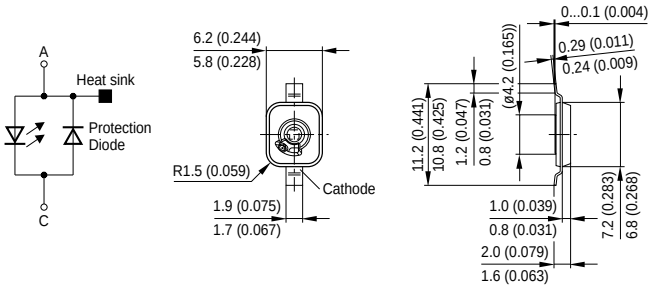


Figure 93: LD 271, LD 271 H

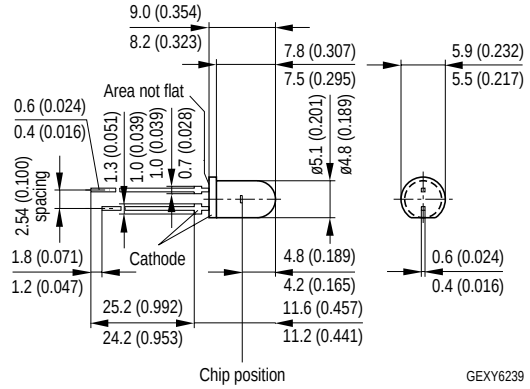


Figure 94: SFH 203, SFH 203 FA, LD 271 L/LH, SFH 415, SFH 4511

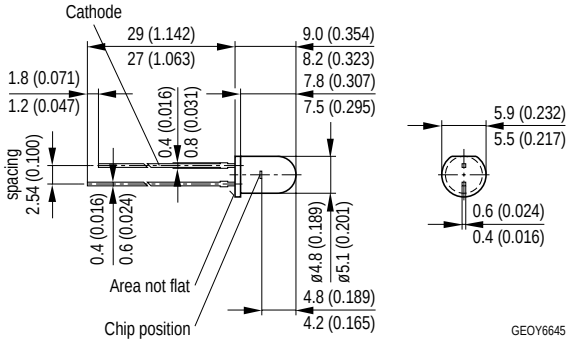


Figure 95: SFH 2701

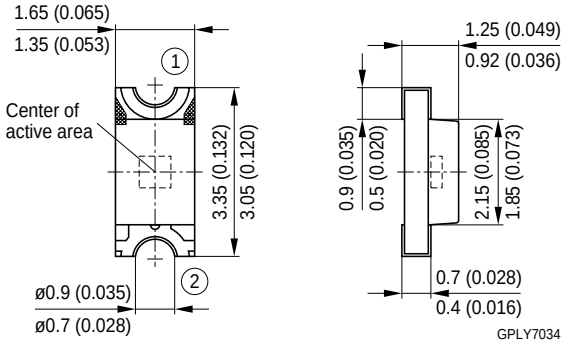


Figure 96: SFH 7710

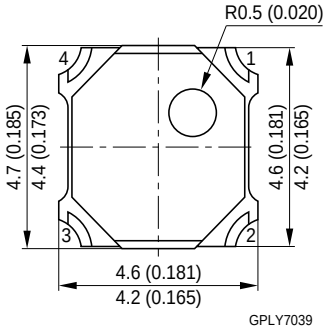


Figure 97: SFH 3600, SFH 3605, SFH 4600, SFH 4605, SFH 4650, SFH 4655, SFH 4680, SFH 4685
For polarity, please see Datasheet

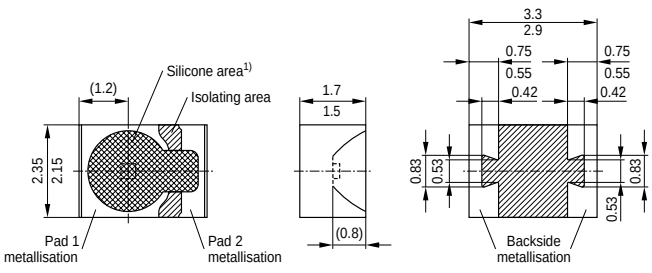


Figure 98: SFH 9500

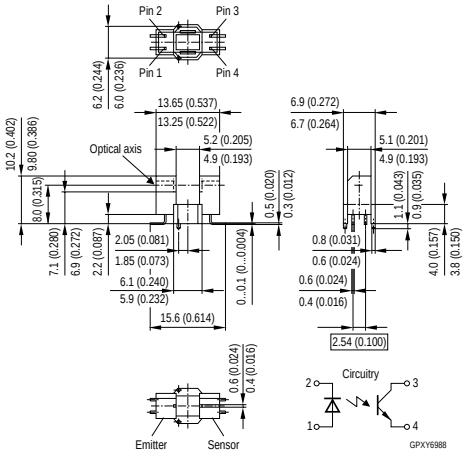


Figure 99: SFH 4730, SFH 4740

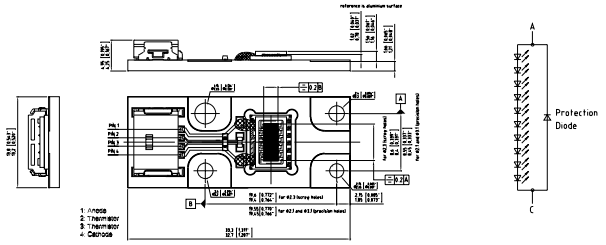


Figure 100: SFH 4556