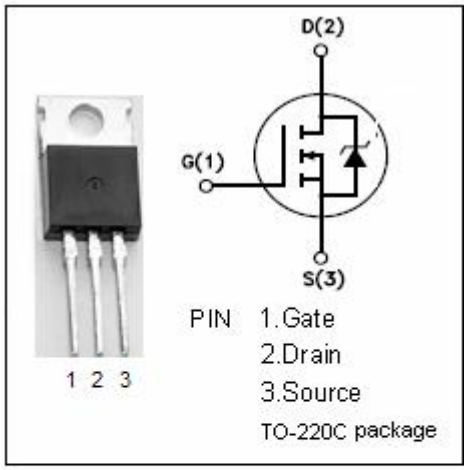
isc N-Channel MOSFET Transistor BUZ100



DESCRIPTION

- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 0.018Ω (Max)
- dv/dt rated
- Ultra low on-resistance
- 175℃ operating temperature

APPLICATIONS

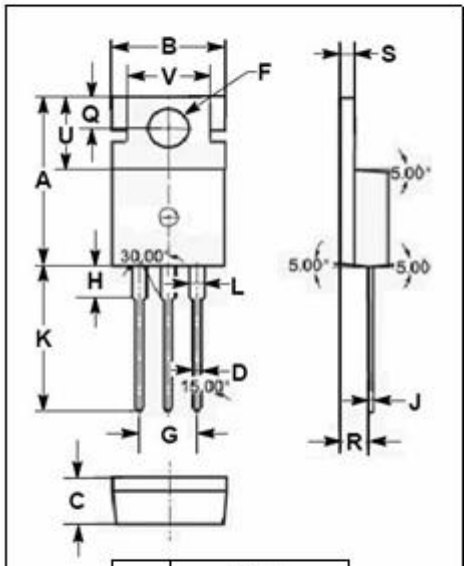
- High current , high speed switching
- Solenoid and relay drivers
- DC-DC & DC-AC converters

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	50	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-continuous@ TC=37℃	60	A
P_{tot}	Total Dissipation@TC=25℃	250	W
T_j	Max. Operating Junction Temperature	-55~175	℃
T_{stg}	Storage Temperature Range	-55~175	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	0.6	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	75	℃/W



DIM	mm MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

isc N-Channel Mosfet Transistor BUZ100

• **ELECTRICAL CHARACTERISTICS (T_C=25℃)**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 0.25mA	50		V
$V_{GS(TH)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D= 1mA	2.1	4	V
$R_{DS(ON)}$	Drain-Source On-stage Resistance	V_{GS}= 10V; I_D= 60A		0.018	Ω
I_{GSS}	Gate Source Leakage Current	V_{GS}= 20V;V_{DS}= 0		100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 50V; V_{GS}= 0		1	uA
V_{SD}	Diode Forward Voltage	I_F= 120A; V_{GS}= 0		1.8	V