

### Circuit Performance

- High output voltage
- Output ripple voltage <100mV

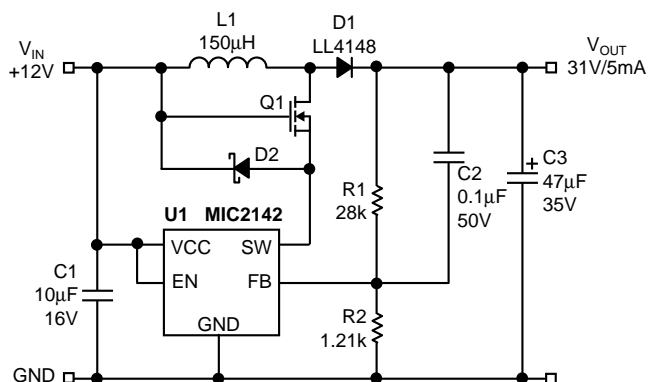


Figure 1. High Output Voltage Circuit

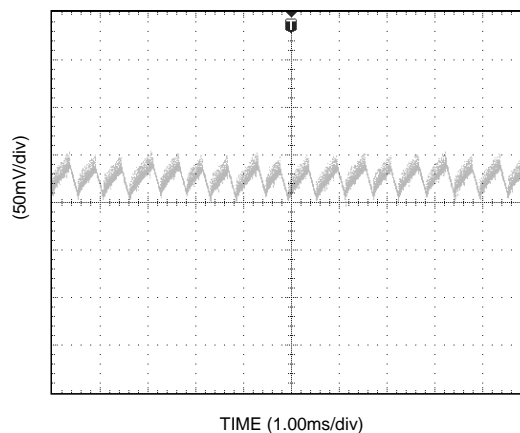


Figure 2. Typical Output Voltage Ripple

### Bill of Materials

Item	Part Number	Manufacturer	Description	Qty
C1	GRM42-6X5R106K16	Murata <sup>1</sup>	10µF/16V Ceramic	1
C2	VJ0805Y104KXAMT	Vishay Vitramon <sup>2</sup>	0.1µF/50V Ceramic	1
C3	TBSE476K035R200	AVX <sup>3</sup>	47µF/35V Tantalum	1
D1	LL4148	General Semiconductor	150mA Small-Signal Diode	1
D2	BAT54A	International Rectifier	200mA Schottky Rectifier	1
L1	1008PS-154M	Coilcraft <sup>4</sup>	150µH Inductor	1
Q1	PMBF170	Phillips Semiconductor	60V N-Channel Transistor	1
R1			28k Resistor	1
R2			1.21k Resistor	1
U1	MIC2142BM5	Micrel <sup>5</sup>	MicroPower Boost Converter	1

**Note 1.** Murata, tel: 949-916-4000

**Note 2.** Vishay-Vitramon, tel: 203-452-5615

**Note 3.** AVX, tel: 843-946-0504

**Note 4.** Coilcraft, tel: 847-639-6400

**Note 5.** Micrel Semiconductor, tel: 408-944-0800

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