

### Circuit Performance

- RF applications
- High efficiency at light load
- Output ripple voltage <100mV

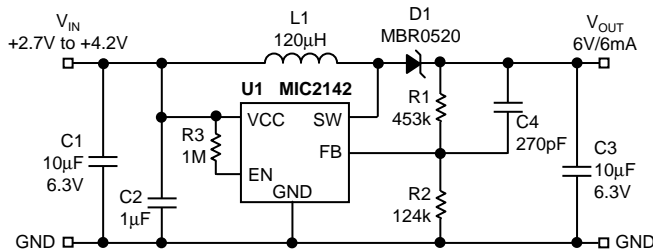


Figure 1. High Efficiency Circuit

$V_{IN}$ V	$I_{IN}$ mA	$V_{OUT}$ V	$I_{OUT}$ mA	Eff %
2.7V	15.3mA	6.0V	6.11mA	89
4.2V	10.0mA	6.0V	6.30mA	90

Figure 2. Typical Output Data

### Bill of Materials

Item	Part Number	Manufacturer	Description	Qty
C1,C3	GRM40X5R106K6.3	Murata <sup>1</sup>	10µF/6.3V Ceramic	2
C2	GRM235Y5V105Z25	Murata <sup>1</sup>	1µF/25V Ceramic	1
C4	GRM40COG271K050AB	Murata <sup>1</sup>	270pF/50V Ceramic	1
D1	MBR0520	On Semiconductor <sup>2</sup>	0.5A 20V Schottky Rectifier	1
L1	CDC5D23-121K	Sumida <sup>3</sup>	120µH	1
R1	CRCW08054533FRT1	Vishay-Dale <sup>4</sup>	453k 1% 1/10W, size 0805	1
R2	CRCW08051243FRT1	Vishay-Dale <sup>4</sup>	124k 1% 1/10W, size 0805	1
R3	CRCW08051004JRT1	Vishay-Dale <sup>4</sup>	1M 5% 1/10W, size 0805	1
U1	MIC2142BM5	Micrel <sup>5</sup>	Micropower Boost Converter	1

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

**Note 2.** On Semiconductor, tel: 800-344-3860

**Note 3.** Sumida, tel: 510-668-0660

**Note 4.** Vishay-Dale, tel: 207-324-4140

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

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