



CAMERA VOLTAGE REGULATOR KIT (Rev B Series)

SPECIFICATIONS

Input Voltage: 6.0VDC to 8.5VDC, reverse battery protected.
 Output Voltage: 5.0VDC \pm 5%, thermally protected.
 Output Current: 400mA typical at 7.5V operation.
 Size/Weight: 1.5" x 0.9" (33mm x 23mm), 5 grams.
 Applications: CMOS/CCD camera power or general all-purpose use.

BILL-OF-MATERIALS

QTY	PART TYPE	REF	DESCRIPTION
1	1N5819	D1	Schottky Diode
1	10uF/16V	C1	Electrolytic Cap
1	470uF/10V	C2	Electrolytic Cap
1	LM2940S-5.0	U1	5V Regulator SMD IC
1	PCB	N/A	Printed Circuit Board

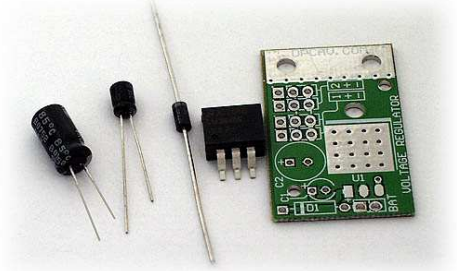


Figure 2, Kit contents.



Figure 3, Assembled.

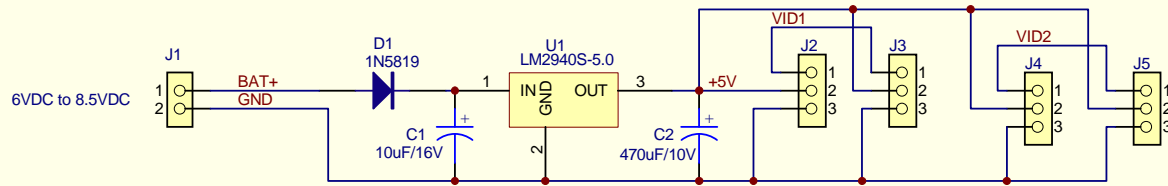
1 ASSEMBLY NOTES

- 1.1 Solder the two caps, diode, and Vreg IC per the reference designators on the circuit board. Observe component polarity!
- 1.2 The heavy metal tab on the Voltage Regulator IC (U1) body MUST be soldered to the circuit board. Solder flux and good soldering iron heat will help the solder flow under the component.

2 INSTALLATION NOTES

- 2.1 J1 (BAT) is the battery input, which has a recommended voltage range of 6.0VDC to 8.5VDC. Voltages up to 14VDC are possible if the required output current is low, otherwise the VReg will run too hot.
- 2.2 As shown on the schematic and circuit board, there is a pair of output connections labeled VID1 and VID2. These have common 5V, ground, and a spare signal. Connect them as needed in your application. The silkscreen on the circuit board has helpful references, described as follows:
 - Ref 1 or 2: See schematic.
 - Ref + : +5VDC.
 - Ref - : Ground.
- 2.3 The temperature of the regulator is adversely affected by the battery voltage and output current (higher voltage or current means hotter operation). If the regulator runs too hot during use then a heatsink and additional airflow will be required. There are mounting holes at the end of the board for attaching it to an appropriate aluminum panel or chassis for effective heatsink use. A good rule-of-thumb is if the regulator is too hot for you to comfortably touch for 60 seconds, then it is too hot for reliable operation.

CAMERA VOLTAGE REGULATOR



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