



AM Power Systems

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CYCLONE Series

ULTRA-LOW Power DC-DC Converter w/ Single Input Voltage (3-5V) and w/Dual HI-Voltage Adjustable Outputs

AM80v150-RCM - Vout1 to -800V and Vout2 to +1.5KV

The **AM80v150-RCM** is an ultra-low power, multiple high voltage output DC-DC converter with the input voltage (Vin) range being 3.0 to 5.0 volts and the independent dual output voltages (Vout) of -800V and +1,500V; each w/external control capability of +/- 25%. Applications include photo-multiplier applications as with radiation detection, industrial control verification, medical imaging or other Homeland Security detection equipment. With the latest in PWM integrated circuit (IC) design, these high efficiency parts have an output ripple less than 1%.

SPECIFICATIONS:

Internal regulation with solid-state PWM design and with the capability of output voltage setting by an external control voltage feature

Input Voltage (Vin): $V_{in} \geq +3.0V \leq +5V$

Multiple Output Voltages (Vout 1 & Vout2):

Output 1 Voltage (Vout1): independent output w/adjustment range of $\pm 25\%$ min. by Vin control pin #2 (-400V to -800V range)

Output 2 Voltage (Vout2): isolated output with adjustable range of $\pm 25\%$ min. by/control pin #3 (+900V to +1500V range)

w/ $\pm 10\%$ Vout tolerance at nominal input voltage

Maximum load/output current: 100uA @ -600V and 1uA @ 1.2KV

Maximum input current: 27mA at 5V input voltage and max load

Maximum power consumption: 0.15W at max load of 10 Mohm resistance.

Maximum "no load" power consumption: 0.03W.

Vout1 and Vout2 stability over temperature: +/- 3%

Capability of auto thermal and over-voltage shutdown included

Min Efficiency: 40% with maximum load.

Output voltage ripple: $\pm 1\%$ max. Vout

OTHER CONSIDERATIONS:

Max Size: (37x37x13)mm ± 2 mm.

EMI shielding: w/metal can/cover and mesh (as req'd)

Environmental Temperature range: -10C +50C

PCB mount: Thru-hole (Suffix - T)

PRICE & DELIVERY:

Delivery from stock for small quantities (<10 units)

Pricing at the 2-4 pc. level is \$289.00 each

5-9 unit pricing is \$259.00 each

10-19 units - \$229.50 each.

20-29 units - \$199.00 each

Higher Volumes - contact factory

NRE FEES FOR CUSTOM DESIGNS (customer application specific Vout req'ts)

Up-front fees - \$3,750.00 payable 2/3 at time of order placement, balance on delivery of samples

First delivery of 2-9 units in 3-4 weeks after P.O. placement

Delivery up to 10-25 units in 2-3 weeks after first delivery.