



AM Power Systems

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LIGHTNING Series

AM0603v-VNM w/Vin adjustment on Vout1
AM0603v-RNM w/separate Resistor adjustment for Vout1
(Preliminary 09'07)

The **AM0603v-NM** is an ultra-low power, single high output voltage DC-DC converter with the input voltage (Vin) range being 3.0 to 5.0 volts and with the output voltage (Vout) centerpoint being -500V with a $\pm 20\%$ controllable variance for a range of -400V to +600V. Applications include radiation detection, industrial control verification, medical imaging or 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 with the capability of output voltage setting by an external control voltage feature

Input voltage: $V_{in} \geq +3.0V \leq +5V$

Output voltage: Vout1 (variable) -500V (negative) w/ $\pm 10\%$ Vout tolerance at nominal input voltage

Output voltage: Vout1 adjustment range: $\pm 20\%$ min. w/Vin adjustment or separate control pin (-400 to -600V)

Maximum load/output current: 100uA at -500V

Maximum input current: 32mA at 5V input voltage and max load

Maximum power consumption: 0.10W at max load of 10 Mohm resistance.

Maximum "no load" power consumption: 0.03W.

Vout1 stability over temperature: $\pm 3\%$

Capability of auto thermal and over-voltage shutdown included

Min Efficiency: 40% on maximum load.

Output voltage ripple: $\pm 1\%$ max. V out

Regulation: referenced to -500V output (V out)

OTHER CONSIDERATIONS:

Max Size: (35x18x12)mm ± 2 mm.

EMI shielding: optional w/metal can/cover

Environmental Temperature range: -10C +50C

PCB mount: Thru-hole

Thru-hole Suffix - T

PRICE & DELIVERY:

Delivery from stock for small quantities (<10 units)

Pricing at the 2-4 pc. level is \$149.00 each,

5-9 unit pricing is \$139.00 each.

10-19 units - \$129.00 each.

20-29 units - \$99.00

For 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.