

## SCE Model 200 Low Voltage DC to DC Converter

The SCE 200 is a low voltage miniature DC to DC regulated converter which is form/fit/function compatible with Technetics 9548 series of converters while offering better regulation and greater efficiency.

This particular unit was designed for use in the Hawk Missile System.

Topology is single transistor (MOSFET) forward converter operating at 50 KHz. Unit is full military in design and construction.

### SPECIFICATIONS

#### Electrical

Input:

Voltage 25VDC to 35VDC, 28VDC nominal

Current .5 Amp max.

Output:

Voltage 5.00VDC, adjustable  $\pm 20\%$

Current 2 Amps (10W)

Idle Current 20mA

Efficiency >70% at 1 Amp load

Ripple 10mV RMS

Line Regulation .1% ( $\pm 5$ mV)

Load Regulation .5% ( $\pm 10$ mV) No load to full load

Switching Frequency 40 KHz

#### Protection Circuits

Isolation, Input to Output 500VDC

Short Circuit Protection Constant current,  $I_{sc} = 3$  Amp

Reverse Polarity Inputs protected against reverse polarity to 50 VDC

#### Environmental Fully compliant with MIL-E-5400 Class 2

Operating Temperature 55°C to + 100°C

Vibration  $\pm 15$ G, 20 - 2 KHz each axis

Shock 30G, 11msec

Construction: Machined aluminum, black anodized finish

Dimensions 2.2" x 4.0" x .80" (less terminals)

Weight 7.5 oz.

Terminals Turret solder type

Encapsulation Silicon Potting Compound GERTV 8112