

10 WATT SINGLE OUTPUT DC TO DC CONVERTER



- Ruggedised construction**
- Wide temperature range**
- Low noise**
- Low profile**

This series of switch mode dc-dc converters provides the electronics designer with a highly specified, cost effective and space efficient solution for airborne, shipboard and ground based applications.

These converters accept a wide input voltage range, conforming to standard military 28V dc supplies.

In order to satisfy military requirements the modules have been designed and tested in accordance with stringent NAVMAT guidelines to provide exceptional electrical and environmental performance.

MODEL	DC INPUT	DC OUTPUT	DIMENSIONS
1-09435	18-80 VOLTS	5V at 2AMPS	69 X 51 X 19mm

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Input Voltage Range	18-80 Volts dc.
Input Power Characteristics	MIL STD. 704E, transients as pre Fig 9, including voltage spikes specified in MIL-E6051.
Isolation:	
Input to Output	50 Mohms@100Vdc
Input to Chassis	100 Mohms@200Vdc
Output to Chassis	50 Mohms@100Vdc
Efficiency	Not less than 75% at full load, 28 volts input and at 25 deg C ambient temperature.
Load Line and Temperature Regulation	+/- 2% of output voltage
Minimum Load Condition	5% of maximum current.
Ripple and Noise	50mV peak to peak max. 0 -20MHz
Output Protection	Output is protected against indefinite overload and short circuit. Power limiting circuitry operates at 120-175% of full rated power. Output voltage recovers automatically when the overload is removed.
Under Voltage Lockout	To protect internal circuits against low input voltages, the converters will not operate below a nominal input voltage of 15V dc.
Hold Up	No hold up is provided although terminal pins are provided for connection of an external capacitor. A series diode is also required.
EMI	The units are designed to meet the following requirements of MIL STD 461C, Part 2, category A1b: CE01, CE03, CS01, CS02, CS06, RE02, RS02, RS03.
Operating Temperature	-40 deg C to +70 deg C case temperature
Storage Temperature	-55 deg C to +100 deg C
Shock	20g for 30 mS, 40g for 9mS $\frac{1}{2}$ SINE
Weight	100 grms.
MTBF	100,000 Hours / AIF 50 deg. C