Model 64PS1

600 WATT DC-DC CONVERTER

FEATURES

- High Power Density, Low Profile Packaging
- Switching Power Supply – Low Noise
- 100% ESS Screened
- Designed and Manufactured Per NAVMAT Guidelines
- Integrated EMI Filtering per Mil-Std 461
- Transient Protection per MIL-STD-704
- 6U Outline

DESCRIPTION

The 64PS1 is a high power density DC-DC converter which accepts +28vdc power and provides a single output at 600 watts continuous / 1,000 watts peak.

Specifications	
Input	Per Mil-Std 704A
Input Voltage	+28Vdc nominal
Input Range	18 to 36vdc
Input Transient Protection	Per Mil-Std 704A
EMI	Per Mil-Std 461D; CE102
Output	
Output Voltage	65Vdc (other values available; contact factory)
Output Power	600 Watts Continuous; 1,000 watts peak
Output Tolerance	±1%
Ripple	50 milli volts P-P max
Line Regulation	0.1% for low to high line changes
Load Regulation	0.1% for 0 to 100% of rated load at nominal input line
Efficiency	85% Typical
Isolation	Input to Output 1,000Vdc; Input to Chassis & Output to Chassis 500Vdc
Protection	
Overload Protection	Continuous short circuit protection with auto recovery
Under / Over Voltage Protection	Will not be damaged by voltages below the minimum or up to 125% of the emergency steady state limit stated in Mil-Std 704A. Will return to normal when voltage returns to normal limits.
Environmental / Physical	
Temperature Range	Operating: -40°C to +85°C at 100% load (Temperature measured at baseplate; conduction via baseplate only); Storage: -55°C to +125°C
Temperature Coefficient	0.01% per °C
Shock	30 G's each axis, per MIL-STD-810C, Method 516.2, Procedure 1. Hammer shock per MIL-S-901C
Acceleration	6 G's per MIL-STD-810C, Method 513.2, Procedure 11, and 14 G's per Procedure 1
Vibration	Per MIL-STD-810C, Method 514.2, Procedure 1A
Reliability (MTBF)	200,000 hours, ground benign, at 50°C baseplate
Humidity	95% at 71°C per MIL-STD-810C, Method 507.1 (non-condensing)
Altitude	40,000 feet per MIL-STD-810C, Method 504.1, Category 6 Equipment
Salt & Fog	Per MIL-STD-810C, Method 509.1
Sand/Dust/Fungus	Per MIL-STD-810C
Dimensions	See outline diagram next page
Weight	4 lbs max
Interface	Connections via an 80 pin Airborne Connector P/N WG80PR7JFF

OUTLINE DIAGRAM