

MS6

MODULAR SYSTEMS / SERIES 6



- 6U power supply w/ integrated EMI filter
- 28VDC input per MIL-STD-704F
- 80% Efficiency
- Designed for full Military Environment
- Up to four Available Outputs
- Output Power up to 1000 Watts
- Primary Power Control
- VME/Vita 41

DESCRIPTION:

The MS6 series DC/DC converter system is designed with an integrated EMI filter that plugs into a VME card case. The VMC power supply can be controlled remotely via remote on/off signal. Prime Power's MS6 series is a high-density 6U power supply designed to meet the input requirements of MIL-STD-704F. The 6U power supply also meets the requirements of MIL-STD-801 for environmental requirements.

GENERAL SPECIFICATIONS				
INPUT VOLTAGE	28VDC			
FREQUENCY RANGE	N/A			
OUTPUT VOLTAGE	5VDC	3.3VDC	+12VDC	-12VDC
OUTPUT CURRENT	100A	60A	2A	2A
PHYSICAL SIZE	EMI/TRANSIENT PROTECTION/INRUSH LIMITING IN 2 SLOT			
	DC CONVERTER SECTION IN 2 SLOT FOR A TOTAL OF 6U			
WEIGHT	CONTACT: SALES@PRIME-POWER.COM			
MTBF	CONTACT: SALES@PRIME-POWER.COM			

PHYSICAL CHARACTERISTICS			
MAXIMUM CASE SIZE	1X2 SLOT, 2X1 SLOT FOR A TOTAL OF 6U		
COOLING METHOD	COOLING THROUGH RAILS MAX AMBIENT TEMP 75℃		
ENCAPSULATION	N/A (CONFORMAL COAT)		
ENCLOSURE FINISH	YELLOW CHROMATE		
BASEPLATE FINISH	YELLOW CHROMATE		
INPUT/OUTPUT	POSITRONICS PCIH49M OR CUSTOMER SPECIFIED		
TERMINATION			
MOUNTING	6U RACK MOUNT		

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1 OWENS CT.

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ELECTRICAL SPECIFICATIONS				
OUTPUT VOLTAGE	5VDC	3.3VDC	+12VDC	-12VDC
LINE REGULATION	2.00%	2.00%	2.00%	2.00%
(LO LINE TO HI LINE)				
LOAD REGULATION	2.00%	2.00%	2.00%	2.00%
(1/2-FL W/SENSE)				
PARD (RIPPLE NOISE)	50mV V p-p	50mV V p-p	75mV P-P	75mV p-p
DC-20MHZ				
OUTPUT POWER	500 WATTS	210 WATTS	20 WATTS	20 WATTS
OVERCURRENT SETPOINT	115% OF RATED CURRENT			
SHORT CIRCUIT CURRENT	110% TYP.			
OVERVOLTAGE SET	120% OF RATED VOLTAGE			
LOAD STEP RECOVERY	OUTPUT VOLTAGE RETURNS TO REGULATED LIMIT WITHIN 0-5			
(1/2 TO FL)	mSEC TYP.			
TURN-ON OVERSHOOT	≤0.5VDC			
EFFICIENCY (MIN)	80% TYP			
ISOLATION	ALL DC OUTPUTS, AND RETURNS TO CHASSIS 1MΩ@50VDC			
EMI FILTERING	MIL-STD-461, RE102, RE103 AT TOP LEVEL, AND CE102			

ENVIRONMENTAL SPECIFICATIONS			
PRESSURE-ALTITUDE	MIL-STD-810F	METHOD 520.4 PROCEDURE 1 & 2	
HIGH TEMPERATURE	MIL-STD-810F	METHOD 501.4 PROCEDURE 1 & 2	
LOW TEMPERATURE	MIL-STD-810F	METHOD 502.4 PROCEDURE 1 & 2	
HUMIDITY	MIL-STD-202G	METHOD 103B	
FUNGUS	MIL-STD-810F	METHOD 508, CONDITION A	
SALT FOG	MIL-STD-202G	METHOD 101 E, TEST CONDITION A	
SAND AND DUST	MIL-STD-810F	METHOD 501.4, PROCEDURE 1 & 2	
EXPLOSIVE ATMOSPHERE	MIL-STD-810F	METHOD 511, CONDITION A	
ACCELERATION	MIL-STD-810F	METHOD 513.5, PROCEDURE 1 & 2	
VIBRATION	MIL-STD-810F	METHOD 514.2	
SHOCK	MIL-STD-883	METHOD 2002.4	

TEMPERATURE SPECIFICATIONS		
OPERATING TEMPERATURE	OPERATING TEMPERATURE -46°C TO +85°C W/RAIL TEMP OF 70°C@MAX AMBIENT TEN	
STORAGE TEMPERATURE	-55ºC TO +100ºC	
TEMPERATURE COEFFICIENT	0.02%/º℃	

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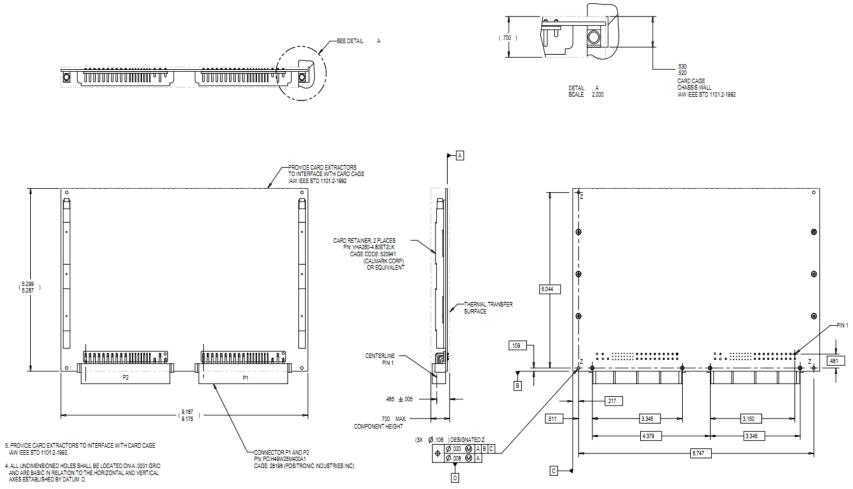
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- 3. THIS DRAWING SHALL NOT BE USED FOR FABRICATION.
- UNLESS OTHERWISE SPECIFIED DIAMETERS AND TOLERANCES TO BE DETERMINED BY FABRICATOR.
- 1. DIMENSIONING AND TOLERANCING IAW ASME Y14.5M-1994.

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