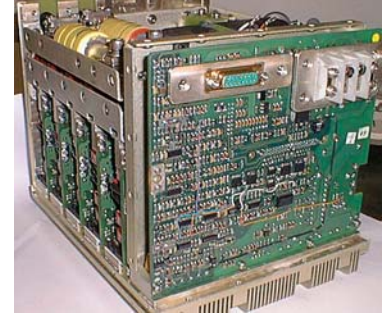


M793 SERIES

HIGH DENSITY, 6.6KW,
NiCad BATTERY INPUT,
SINGLE OUTPUT,
DC/DC CONVERTERS



APPLICATIONS

Military, Ruggedized, Telecom, Industrial

SPECIAL FEATURES

- Extremely Miniature size
- High efficiency
- NiCad Battery Input
- Up to 6.6KW (300V/22A) output
- Input / Output isolation
- Fixed switching frequency
- ON/OFF by command
- EMI/RFI filters included
- Short circuit recovery with ON command
- Over-voltage shutdown with ON command recovery
- Thermal Sensor for baseplate temperature monitoring

ENVIRONMENTAL

Meets or exceeds MIL-STD-810D

Temperature:

Operating -40°C to $+90^{\circ}\text{C}$ (baseplate)

Storage -55°C to $+90^{\circ}\text{C}$

RELIABILITY

25,000 hours, calculated per
MIL-STD-217F at $+55^{\circ}\text{C}$ Ambient,
Airborne, Uninhabited, Cargo (AUC).

ELECTRICAL SPECIFICATIONS

DC INPUT

DC Input: 28 VDC (NiCad Battery Source)

Input transient protection:

High Voltage Transient: 80V

Low Voltage Transient: 16V

All models meet or exceed (no damage):

MIL-STD-704A, MIL-STD-704D (80V for 0.1 Sec)

Efficiency: Up to 84% (Typical 86% at 22V Input)

EMI/RFI:

Meets or exceeds MIL-STD-461C

CS01, CS02, CS06, RE02, CE03

Isolation:

100V between Input and Chassis

500V between Input and Output

DC OUTPUT (floating)

Line/Load regulation: 275 to 340 V

Ripple and Noise: 7Vp-p, Max.

Current limiting :

Current Limit Trip between 24A and 29A,
recovery with ON command

Isolation:

500V between Output and Input

500V between Output and Chassis

SELECTION GUIDE

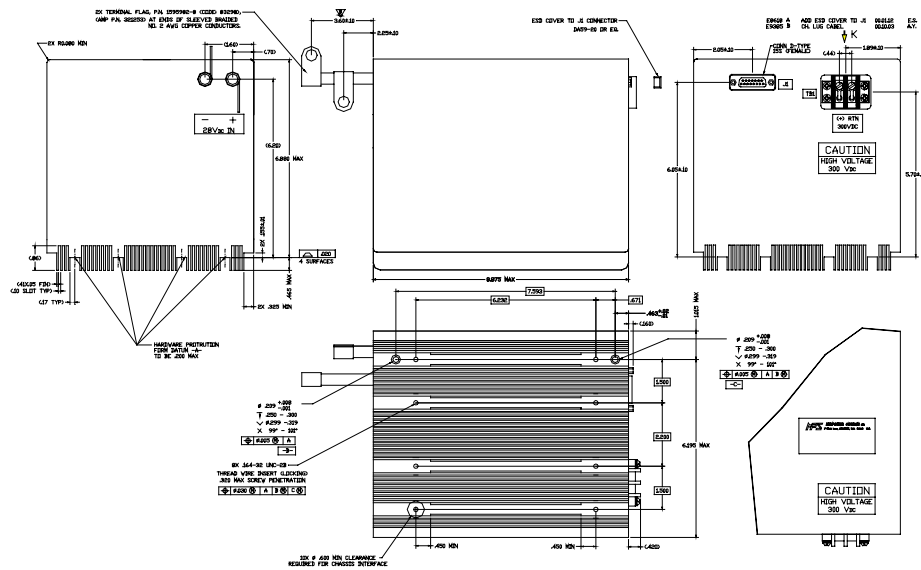
Model	Input	Output	Minimum Load	Maximum Load	Regulation	Ripple (20 MHz BW)
M793	28 VDC	300 VDC	0 A	22 A	275 to 340 V	7 Vp-p Max.

Note: other voltages and currents are available, consult factory.

PIN ASSIGNMENT

PIN No.	PIN Function	PIN No.	PIN Function	PIN No.	PIN Function
1	FTO	6	ENABLE	11	THERMISTOR LOW
2	N.C.	7	ENABLE RTN	12	THERMISTOR HIGH
3	VIN OK	8	+28V SENSE	13	N.C.
4	N.C.	9	N.C.	14	28V ON/OFF
5	28V SENSE RTN	10	SIGNALS RTN	15	+28V INPUT

OUTLINE DRAWING



* Specifications are subject to change without prior notice by the manufacturer

Notes

- Dimensions are in mm [Inches]
- Tolerance is:
.XX ±.02 IN
.XXX ±.01 IN
- Weight: 23 lb (10.4 Kg)

MPS MILPOWER SOURCE

P.O. BOX 810, 7 FIELD LANE RD., ROUTE 106, BELMONT, NEW HAMPSHIRE 03220, U.S.A.
TEL: (603)267-8865, FAX: (603)267-7258 WEBSITE: www.milpower.com

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