

M793 SERIES

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

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°C (baseplate)

Storage -55°C to +90°C

RELIABILITY

25'000 hours, calculated per

MIL-STD-217F at +55°C Ambient,

Airborne, Uninhabited, Cargo (AUC).



ELECTRICAL SPECIFICATIONS

DC INPUT

DC input range: 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 0.1Sec)

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

EMI/RFI:

Design to meet or exceed 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 340V

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 (20MHz BW)
M793	28 VDC	300 VDC	0 A	22 A	275 to 340 V	7 Vp-p Max.

PIN ASSIGNMENT

Pin No.	Pin Function
1	FTO
2	N.C.
3	VIN OK
4	N.C.
5	28V SENSE RTN

Pin No.	Pin Function
6	ENABLE
7	ENABLE RTN
8	+28V SENSE
9	N.C.
10	SIGNAL RTN

Pin No.	Pin Function
11	THERMISTOR LOW
12	THERMISTOR HIGH
13	N.C.
14	28 V ON/OFF
15	+28 V INPUT

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

Notes

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

OUTLINE DRAWING

See on next page

