

M459 SERIES

THE MOST COMPLETE
MINIATURE, QUAD OUTPUT,
DC/DC+AC (400 Hz) CONVERTERS
(UP TO 100W)

APPLICATIONS

Military, Ruggedized, Telecom, Industrial

SPECIAL FEATURES

- Miniature size
- High efficiency
- Wide input range
- Input / Output isolation
- Fixed switching frequency (200 KHz)
- EMI/RFI filters included
- Indefinite short circuit protection with auto-recovery
- Over-voltage shutdown with auto-recovery
- Over temperature shutdown with auto-recovery

ENVIRONMENTAL

Meets or exceeds MIL-STD-810D

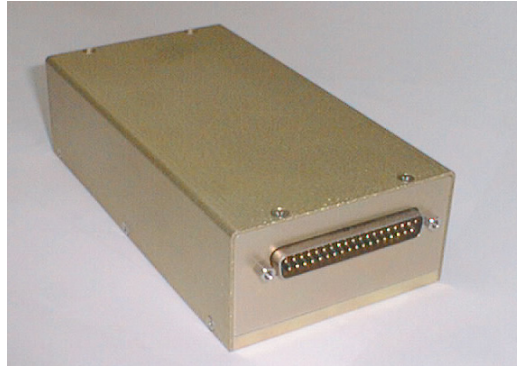
Temperature:

Operating -55°C to +85°C (baseplate)

Storage -55°C to +125°C

RELIABILITY

150,000 hours, calculated per
MIL-STD-217F at +85°C baseplate,
ground fixed.



ELECTRICAL SPECIFICATIONS

DC INPUT

DC Input range: 12 to 36 VDC

Input transient protection:

All models meet or exceed (no damage)

MIL-STD-1275A (100V for 50 mSec) and

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

Efficiency: up to 70%

EMI/RFI:

Meets or exceeds MIL-STD-461D

CE101, CE102, CS101, CS114, CS115,

CS116, RE101, RE102, RS101, RS103

Isolation:

200V between Input and Output

200V between Input and Case

DC/AC OUTPUTS (floating)

Line/Load regulation:

Less than 2% (DC) or 5% (AC)

(no load to full load, -55°C to +90°C)

Ripple and Noise: 50mVp-p, typical (max. 1%)

Current limiting (DC-FoldBack / AC-HickUp):

Continuous protection for unlimited time.

Over voltage protection:

Passive tranzorb on outputs.

Over temperature protection:

Shutdown at baseplate temperature of +105°C (±5°C)

Automatic recovery at baseplate temperature

lower than +95°C (±5°C)

Isolation:

200V between Output and Input

100V between Output and Case

SELECTION GUIDE

Model	Input	Output #1	Output #2	Output #3	Output #4
M459-1	12 to 36 VDC	26V RMS / 2.5A	15V / 0.25A	15V / 0.25A	7V RMS / 10mA

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

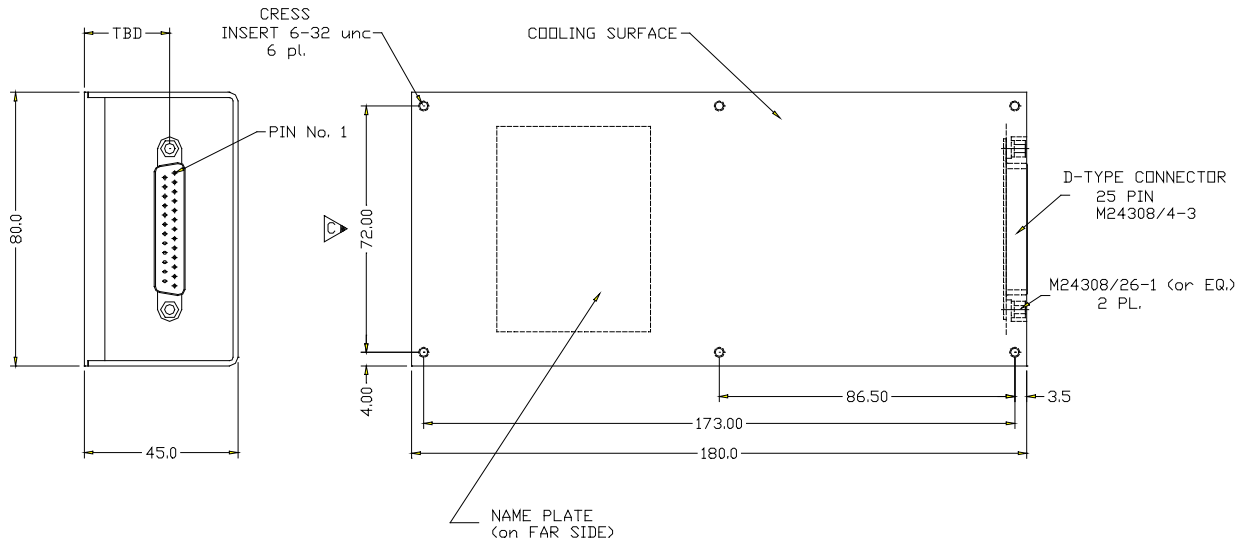
PIN ASSIGNMENT

PIN No.	PIN Function
1	GND
2	VIN RTN
3	+ VIN
4	7V RMS OUT1
5	7V RMS OUT2
6	TIME DELAY
7	N.C.
8	26V RMS OUT1
9	26V RMS OUT2
10	N.C.

PIN No.	PIN Function
11	+15V OUT
12	- 15V OUT
13	± 15V RTN
14	VIN RTN
15	+ VIN
16	7V RMS OUT1
17	7V RMS OUT2
18	N.C.
19	N.C.
20	26V RMS OUT1

PIN No.	PIN Function
21	26V RMS OUT2
22	N.C.
23	+15V OUT
24	- 15V OUT
25	± 15V RTN

OUTLINE DRAWING



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

Notes

1. Dimensions are in MM
2. Tolerance is:
 .XX ± 0.5 MM
 .XXX ± 0.2 MM
3. Weight: 870gr (28 Oz)