

M7425 SERIES

**MINIATURE, HIGH DENSITY,
SINGLE OUTPUT,
DC/DC CONVERTERS
(UP TO 800W)**



APPLICATIONS

Military, Ruggedized, Telecom, Industrial

SPECIAL FEATURES

- Miniature size
- High efficiency
- Wide input range
- Input / Output isolation
- Remote sense
- Redundancy connection
- Fixed switching frequency (250 KHz)
- External synchronization capability
- TTL logic enable
- 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: 18 to 48 VDC or 48 to 72 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 85%

EMI/RFI:

Design to meet or exceed MIL-STD-461C

CE03, CE07, CS01, CS02, CS06, RE02, RS02, RS03

Isolation:

200V between Input and Output

200V between Input and Case

DC OUTPUT (floating)

Line/Load regulation:

Less than $\pm 1\%$, Typical

(no load to full load, -55°C to +85°C)

Ripple and Noise: 50mVp-p, typical ($\pm 1\%$)

Current limiting (hiccup):

Continuous protection for unlimited time

Over voltage protection:

Electronic shutdown with automatic recovery and
a passive tranzorb on output.

Over temperature protection:

Shutdown at baseplate temperature of +105°C ($\pm 5^\circ\text{C}$)

Automatic recovery at baseplate temperature

lower than +95°C ($\pm 5^\circ\text{C}$)

Isolation:

200V between Output and Input

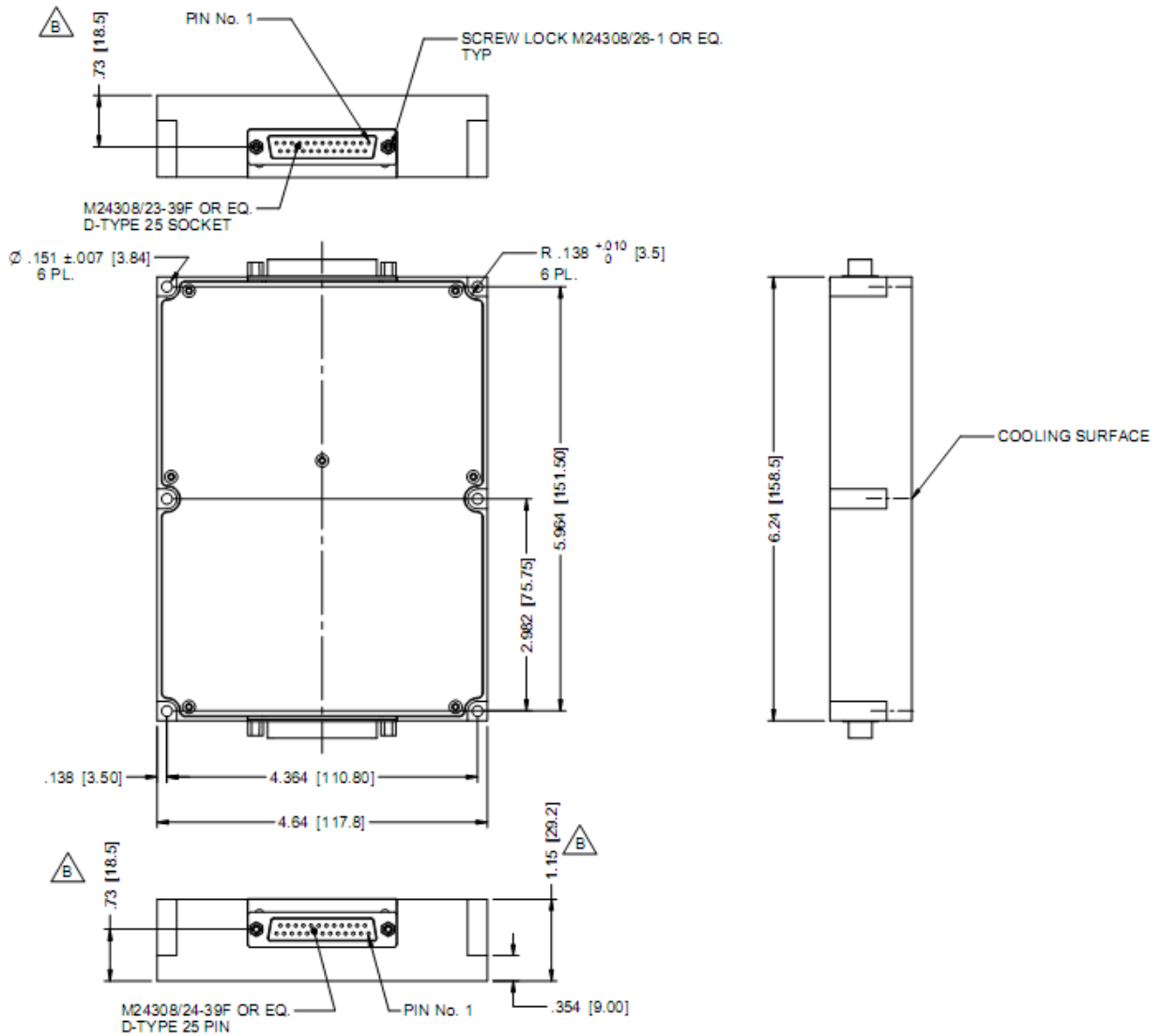
100V between Output and Case

PIN ASSIGNMENT

Pin Function	J1(PIN) Pin Numbers
+ VIN	1÷5, 14÷17
VIN RTN	7÷10, 19÷23
CHASSIS	11
SYN	25
SIGNAL RTN	13
INHIBIT	12

Pin Function	J2 (SOCKET) Pin Numbers
+ SENSE	1
- SENSE	13
VOUT	2÷6, 14÷18
VOUT RTN	8÷12, 21÷25

OUTLINE DRAWING



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

Notes

1. Dimensions are in mm
2. Tolerance is:
.XX ± 0.01 IN
.XXX ± 0.005 IN
3. Weight: Approx. 30 Oz (900 gr.)
4. Other connectors types also available, please consult factory.