

M8727 SERIES

**MINIATURE, HIGH DENSITY,
DUAL OUTPUT,
DC/DC CONVERTERS**
(UP TO 80W)

APPLICATIONS

Military, Ruggedized, Telecom, Industrial

SPECIAL FEATURES

- Miniature size
- High efficiency
- Wide input range
- Up to 20 W/IN³
- Input / Output isolation
- Fixed switching frequency (250 KHz)
- TTL logic enable
- EMI/RFI filters included
- Indefinite short circuit protection with auto-recovery
- Input over-voltage shutdown with auto-recovery
- Over temperature shutdown with auto-recovery

ENVIRONMENTAL

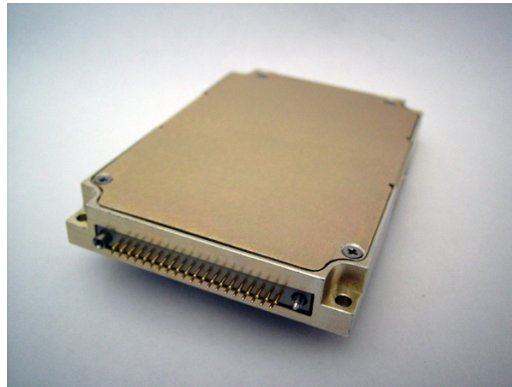
Meets or exceeds MIL-STD-810D

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.

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



ELECTRICAL SPECIFICATIONS

DC INPUT

DC Input range: 18 to 48 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)

Over-voltage shutdown with auto-recovery

Efficiency: Up to 82%

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 ±1% (no load to full load, -55°C to +85°C)

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

Current limiting (Foldback):

Continuous protection for unlimited time

Over voltage protection:

Passive tranzorb on output.

Over temperature protection:

Shutdown at baseplate temperature of +100°C (±5°C)
Automatic recovery at baseplate temperature
lower than +90°C (±5°C)

Isolation:

200V between Output and Input
100V between Output and Case

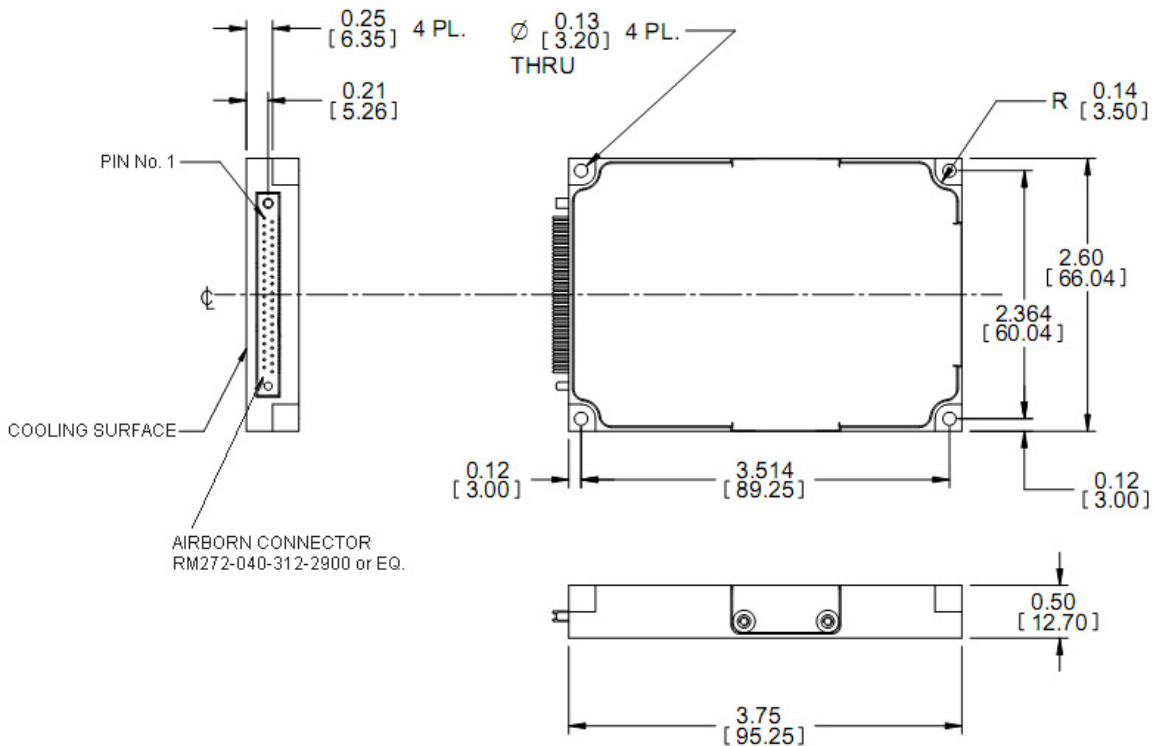
PIN ASSIGNMENT

PIN No.	PIN Function
18, 19, 20, 38, 39	VOUT 1
16, 17, 35, 36, 37	VOUT 1 RTN
12, 13, 32, 33	VIN
10, 11, 29, 30	VIN RTN
3, 4, 5, 23, 24	VOUT 2

PIN No.	PIN Function
6, 7, 25, 26, 27	VOUT 2 RTN
1	SYN INPUT
21	SIGNAL RTN
22	INHIBIT
40	+SENSE (VOUT 1)

PIN No.	PIN Function
15	-SENSE (VOUT 1)
2	+SENSE (VOUT 2)
8	-SENSE (VOUT 2)
14	CHASSIS
9, 28, 31, 34	N.C.

OUTLINE DRAWING



Notes

1. Dimensions are in Inches [mm]
2. Tolerance is:
.XX ±0.01 IN
.XXX ±0.005 IN
3. Weight: Approx. 6.35 Oz (180 gr)

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