

M4243 SERIES

HIGH DENSITY
SINGLE OUTPUT
DC/DC CONVERTERS
(UP TO 400W)

APPLICATIONS

Military, Ruggedized, Telecom, Industrial



SPECIAL FEATURES

- High efficiency
- Input / Output isolation
- Fixed switching frequency (400KHz)
- 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 40 VDC

Input transient protection:

All models meet or exceed (no damage)
MIL-STD-1275A (100V for 50mSec) and
MIL-STD-704A, MIL-STD-704D (80V for 0.1Sec)

Over-voltage shutdown with auto-recovery

Efficiency: 86%, typical (75% to full load)

EMI/RFI:

Design to meet MIL-STD-461C
CE03, CS01, CS02, CS06, RS03

Isolation:

500V between Input and Output

100V between Input and Case

DC OUTPUT (floating)

Line /load regulation:

Less than 2% (no load to full load, -55°C to +85°C)

Ripple and noise: 500mVp-p, typical (max. 1%)

Current limiting (Hiccup):

Continuous protection for unlimited time.

Over voltage protection:

Passive transzorb 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:

500V between Output and Input

500V between Output and Case

SELECTION GUIDE

Model	Input	Output	Maximum Load	Regulation	Ripple (20MHz BW)
M4243-1	28 VDC	300 V	1 A	± 1 %	1 Vp-p
M4243-2	18-36 VDC	270 V	1A	± 1 %	1 Vp-p

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

PIN ASSIGNMENT

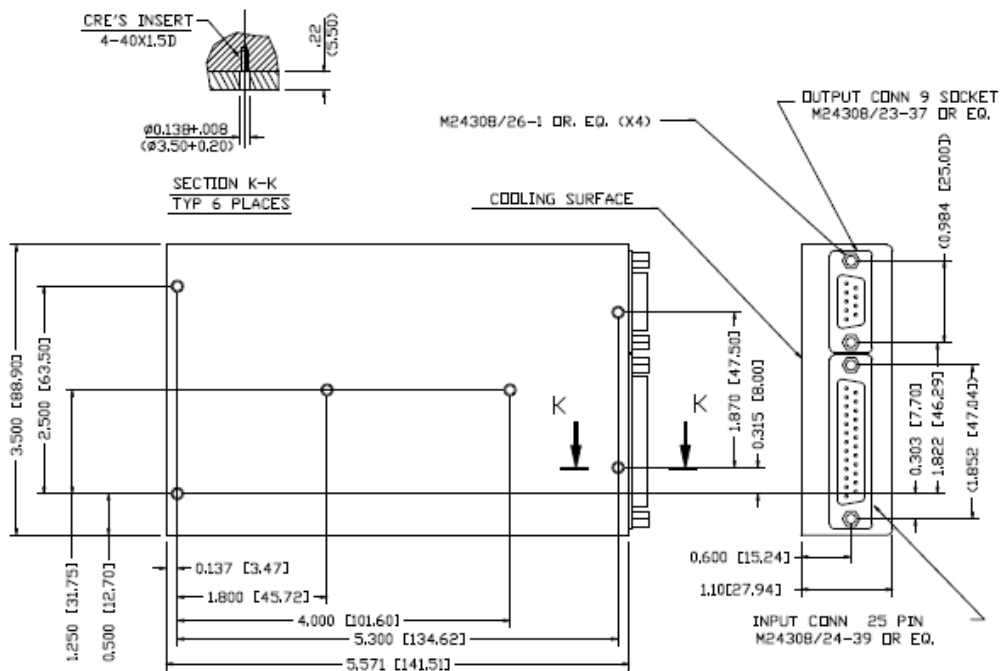
J1

Pin No.	Pin Function
1, 2, 3, 4, 5, 14, 15, 16, 17, 18	+ VIN
7, 8, 9, 10, 11, 20, 21, 22, 23, 24	VIN RTN
13	INHIBIT
6, 12, 19, 25	N.C.

J2

Pin No.	Pin Function
3, 7	+ VOUT
5, 9	VOUT RTN
1	CHASSIS
2, 4, 6, 8	N.C.

OUTLINE DRAWING



Notes

- Dimensions are in Inches [mm]
- Tolerance is:
.XX ±.02 IN
.XXX ±.01 IN
- Weight: Approx. 23 Oz (650gr)

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