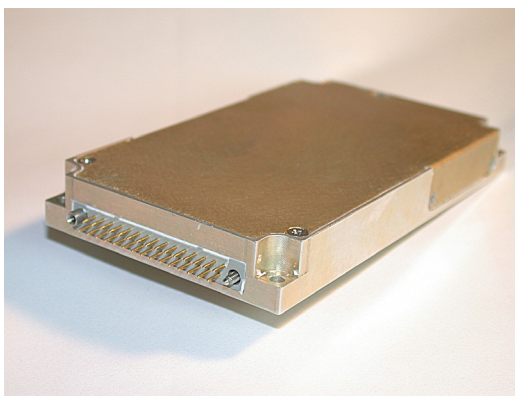


M7128 SERIES

THE MOST COMPLETE
MINIATURE, HIGH DENSITY,
SINGLE OUTPUT,
DC/DC CONVERTERS
(UP TO 200W)



APPLICATIONS

Military, Ruggedized, Telecom, Industrial

SPECIAL FEATURES

- Miniature size
- High efficiency
- Wide input range
- Up to 29 W/IN³
- Input / Output isolation
- Remote sense
- Parallel connection of modules
- Redundancy connection
- Fixed switching frequency (250 KHz)
- External synchronization capability
- TTL logic enable
- EMI/RFI filters included
- Output voltage adjustment with external resistor
- 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 +90°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
33 to 78 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: 78 ÷ 84%

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 +90°C)

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

Current limiting (HickUp):

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 (±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	Maximum Load	Regulation	RIPPLE (20MHz BW)
M7128-1	18 to 48 VDC	5 VDC	20A	± 1%	50mVp-p
M7128-2	18 to 48 VDC	12 VDC	13A	± 1%	50mVp-p
M7128-3	18 to 48 VDC	15VDC	10A	± 1%	50mVp-p
M7128-3RA	18 to 48VDC	15VDC	10A	± 1%	50mVp-p
M7128-5	18 to 48 VDC	28VDC	5A	± 1%	50mVp-p
M7128-6	16 to 42VDC	16VDC	9A	± 1%	50mVp-p
M7128-7	16 to 42VDC	18VDC	6A	± 1%	50mVp-p
M7128-8	16 to 42VDC	28VDC	6A	± 1%	50mVp-p
M7128-9	18 to 48VDC	10.5VDC	15A	± 1%	50mVp-p
M7128-10	18 to 48VDC	10.5VDC	10A	± 1%	50mVp-p
M7128-11	18 to 48VDC	24VDC	6A	± 1%	50mVp-p
M7128-12	18 to 48VDC	25VDC	6.8A	± 1%	50mVp-p
M7128-13	16 to 32VDC	15VDC	9A	± 1%	50mVp-p
M7128-14	24 to 33VDC	12VDC	11.5A	± 1%	50mVp-p
M7128-15	20 to 36VDC	19VDC	8A	± 1%	50mVp-p
M7128-16	18 to 48VDC	28VDC	6A	± 1%	50mVp-p

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

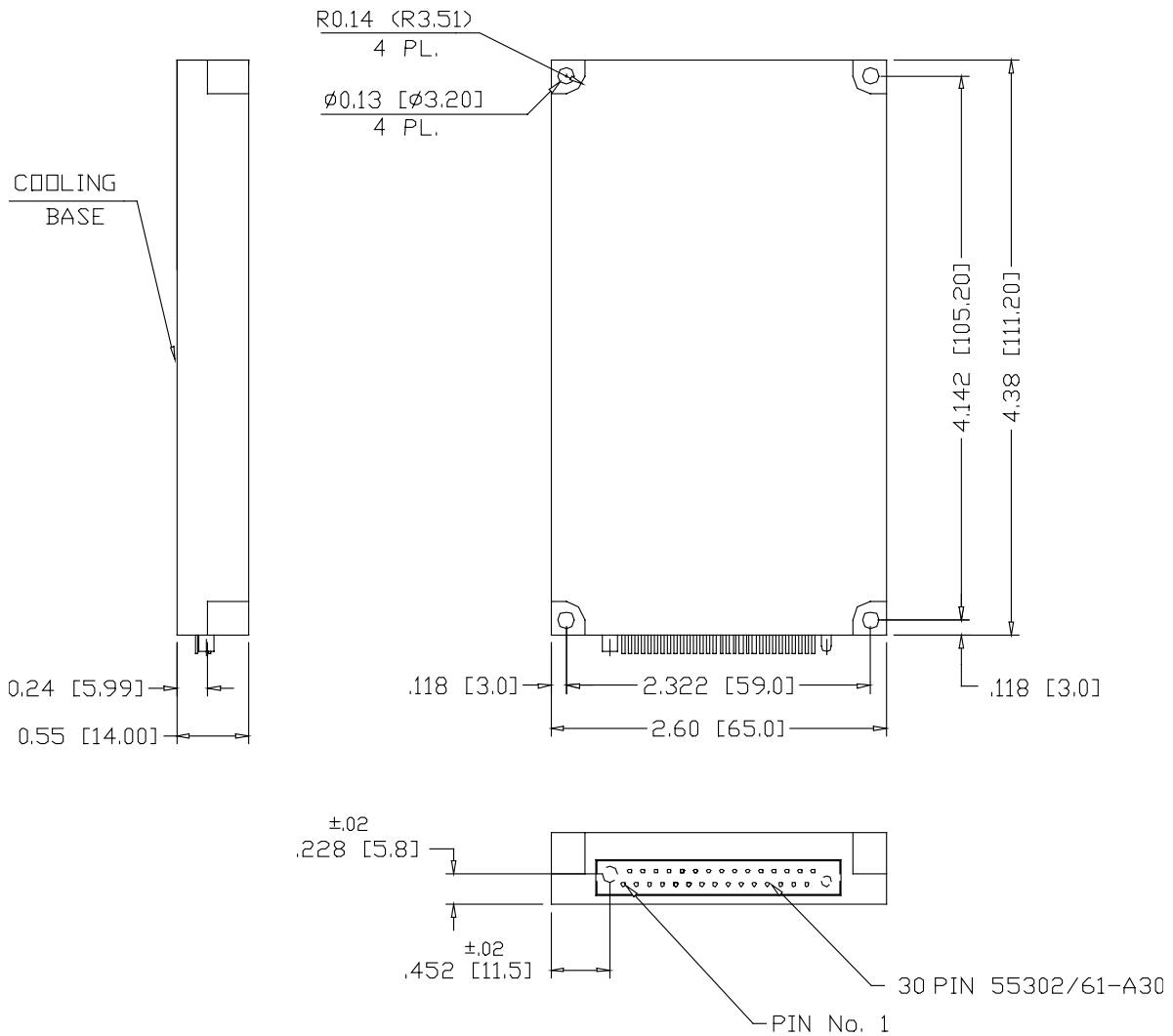
PIN ASSIGNMENT

Pin No.	Pin Function
1	+VIN
2	+VIN
3	- VIN
4	- VIN
5	PAR IN
6	PAR OUT
7	IN SIGNAL RTN
8	SYNC OUT
9	+OUT
10	+OUT

Pin No.	Pin Function
11	+OUT
12	- OUT
13	- OUT
14	- OUT
15	+SENSE
16	+VIN
17	+VIN
18	- VIN
19	- VIN
20	INHIBIT

Pin No.	Pin Function
21	OUT V/CAL
22	OUT SIGNAL RTN
23	SYNC IN
24	+OUT
25	+OUT
26	+OUT
27	- OUT
28	- OUT
29	- OUT
30	- SENSE

OUTLINE DRAWING



Notes

1. Dimensions are in Inches [mm]
2. Tolerance is:
 .XX ±.02 IN
 .XXX ±.01 IN
3. Weight: 7.77 Oz (224gr)
4. Add suffix SL to specify connector with guide set per M55302/57-A30X

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