

M8667 SERIES

DC/DC POWER SUPPLY



PRODUCT HIGHLIGHTS

- MINIATURE
- HIGH DENSITY
- SIX OUTPUTS
- DC/DC CONVERTER
- UP TO 125W



APPLICATIONS

Military, Ruggedized, Telecom, Industrial

SPECIAL FEATURES

- Miniature size
- High efficiency
- Wide input range
- Input Output isolation
- 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 70 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)

Efficiency: up to 80%

EMI/RFI:

Designed to meet MIL-STD-461F* CE101, CE102, CS101, CS114, CS115, CS116, RE101, RE102, RS101, RS103

Isolation:

200V between Output and Input

100V between Output 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 (Hiccup):

Continuous protection for unlimited time.

Over voltage protection:

Passive transorb 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

* Compliance achieved with 5µH LISN, shielded harness and static resistive load.

PIN ASSIGNMENT (SD – Side Connector)

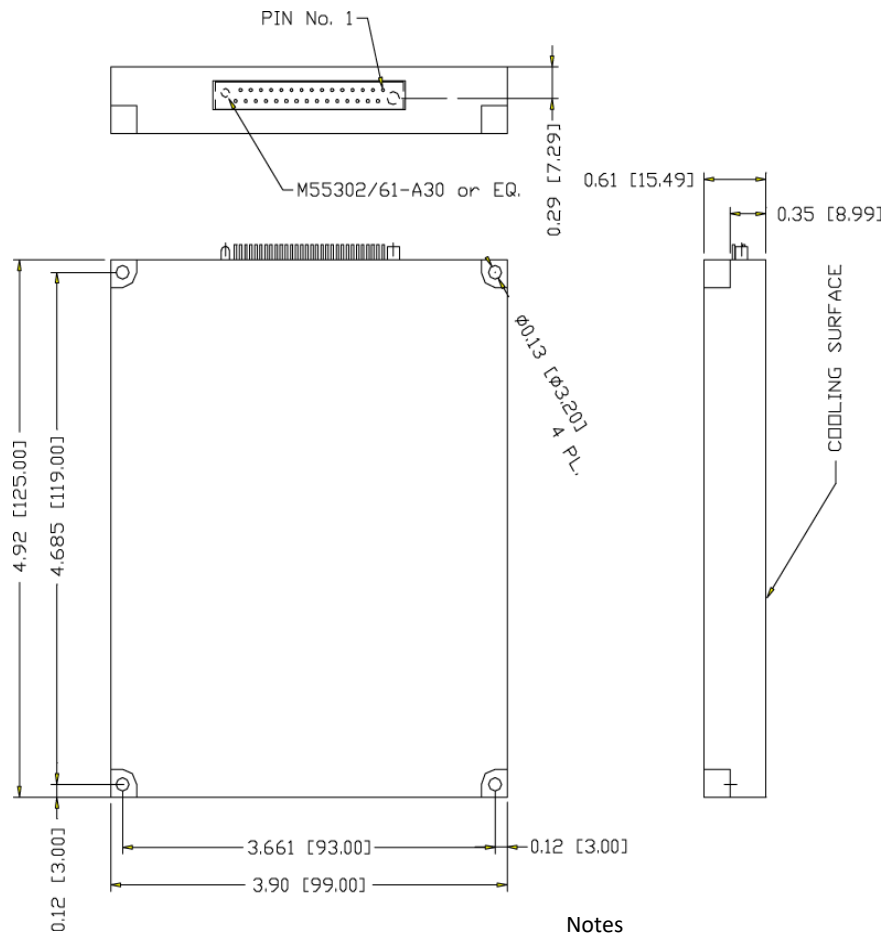
| Pin No. | Pin Function |
|---------|--------------|
| 1 | +OUT 1 |
| 2 | - OUT 1 |
| 3 | +OUT 5 |
| 4 | +OUT 6 |
| 5 | - OUT 4 |
| 6 | +OUT 2 |
| 7 | - OUT 2 |
| 8 | +OUT 3 |
| 9 | - OUT 3 |
| 10 | N.C. |

| Pin No. | Pin Function |
|---------|--------------|
| 11 | SYN |
| 12 | - VIN |
| 13 | - VIN |
| 14 | +VIN |
| 15 | +VIN |
| 16 | +OUT 1 |
| 17 | - OUT 1 |
| 18 | -OUT 5 |
| 19 | - OUT 6 |
| 20 | +OUT 4 |

| Pin No. | Pin Function |
|---------|--------------|
| 21 | +OUT 2 |
| 22 | - OUT 2 |
| 23 | +OUT 3 |
| 24 | +OUT 3 |
| 25 | INHIBIT |
| 26 | SIGNAL RTN* |
| 27 | - VIN |
| 28 | - VIN |
| 29 | +VIN |
| 30 | +VIN |

* Signal RTN for the INHIBIT and the SYN signals.

OUTLINE DRAWING (SD – Side Connector)



Notes

1. Dimensions are in Inches [mm]
2. Tolerance is:
.XX ± 0.02 IN
.XXX ± 0.01 IN
3. Weight: 14 oz (404g)
4. Add suffix SD to specify Side connector.

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

PIN ASSIGNMENT (Upper Panel Connector)

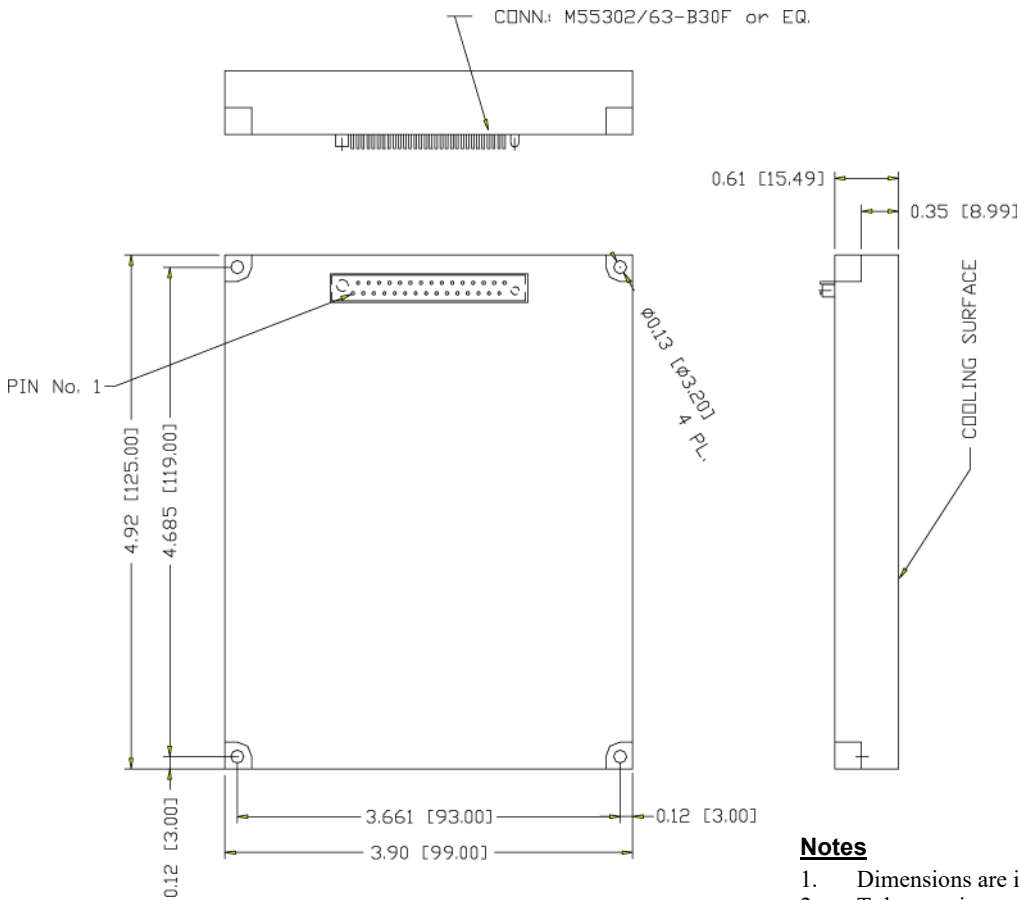
| Pin No. | Pin Function |
|---------|--------------|
| 1 | +VIN |
| 2 | +VIN |
| 3 | - VIN |
| 4 | - VIN |
| 5 | SIGNAL RTN* |
| 6 | INHIBIT |
| 7 | - OUT 3 |
| 8 | +OUT 3 |
| 9 | - OUT 2 |
| 10 | +OUT 2 |

| Pin No. | Pin Function |
|---------|--------------|
| 11 | - OUT 4 |
| 12 | - OUT 6 |
| 13 | - OUT 5 |
| 14 | - OUT 1 |
| 15 | +OUT 1 |
| 16 | +VIN |
| 17 | +VIN |
| 18 | - VIN |
| 19 | - VIN |
| 20 | SYN |

| Pin No. | Pin Function |
|---------|--------------|
| 21 | - OUT 3 |
| 22 | +OUT 3 |
| 23 | - OUT 2 |
| 24 | +OUT 2 |
| 25 | N.C. |
| 26 | +OUT 4 |
| 27 | +OUT 6 |
| 28 | +OUT 5 |
| 29 | - OUT 1 |
| 30 | +OUT 1 |

* Signal RTN for the INHIBIT and the SYN signals.

OUTLINE DRAWING (Upper Panel Connector)



Notes

1. Dimensions are in Inches [mm]
2. Tolerance is:
.XX ± 0.02 IN
.XXX ± 0.01 IN
3. Weight: 14 oz (404g)
4. Add suffix SD to specify Side connector.

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