

M8667 SERIES

THE MOST COMPLETE
MINIATURE, HIGH DENSITY,
SIX OUTPUTS,
DC/DC CONVERTERS
(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 $+90^{\circ}\text{C}$ (baseplate)

Storage -55°C to $+125^{\circ}\text{C}$

RELIABILITY

150,000 hours, calculated per
MIL-STD-217F at $+85^{\circ}\text{C}$ 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 50 mSec) and

MIL-STD-704A, MIL-STD-704D (80V for 0.1 Sec)

Efficiency: up to 80%

EMI/RFI:

Meets or exceeds MIL-STD-461D

CE101, CE102, CS101, CS114, CS115,

CS116, RE101, RE102, RS101, RS103

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 $+90^{\circ}\text{C}$)

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

Current limiting (HickUp):

Continuous protection for unlimited time

Over voltage protection:

Passive tranzorb on outputs.

Over temperature protection:

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

Automatic recovery at baseplate temperature

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

Isolation:

200V between Output and Input

100V between Output and Case

SELECTION GUIDE

All Models	Regulation	Ripple (20 MHz BW)
	± 1%	50 mVp-p

Model	Input	Output #1	Output #2	Output #3	Output #4	Output #5	Output #6
M8667-1	18 to 70 VDC	5V/7A	15V/1.5A	15V/1.5A	28V/1A	18V/0.3A	18V/0.3A
M8667-1SD	18 to 70 VDC	5V/3A	15V/3A	15V/3A	30V/1A	18V/0.3A	18V/0.3A
M8667-4	28 ± 6 VDC	5V/3A	15V/3A	15V/3A	30V/1A	18V/0.3A	18V/0.3A
M8667-5	28 ± 6 VDC	5.2V/3A	15V/3A	15V/3A	30V/1A	18V/0.3A	18V/0.3A
M8667-6SD	28 ± 6 VDC	3.3V/8A	6V/5A	5V/2A	6V/1A	15V/0.5A	24V/0.5A
M8667-8SD	18 to 48 VDC	3.3V/5A	5V/7A	15V/2A	15V/1A	15V/0.5A	5V/0.5A
M8667-9	18 to 48 VDC	3.3V/3A	8V/2A	8V/0.5A	30V/0.01A	30V/0.1A	30V/0.1A
M8667-10	18 to 48 VDC	5.2V/3A	15V/3.5A	15V/2.5A	30V/1A	18V/0.5A	18V/0.5A

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

PIN ASSIGNMENT (Upper Panel Connector)

PIN No.	PIN Function	PIN No.	PIN Function	PIN No.	PIN Function
1	+ VIN	11	- OUT 4	21	- OUT 3
2	+ VIN	12	- OUT 6	22	+ OUT 3
3	- VIN	13	- OUT 5	23	- OUT 2
4	- VIN	14	- OUT 1	24	+ OUT 2
5	SIGNAL RTN *	15	+ OUT 1	25	N.C.
6	INHIBIT	16	+ VIN	26	+ OUT 4
7	- OUT 3	17	+ VIN	27	+ OUT 6
8	+ OUT 3	18	- VIN	28	+ OUT 5
9	- OUT 2	19	- VIN	29	- OUT 1
10	+ OUT 2	20	SYN	30	+ OUT 1

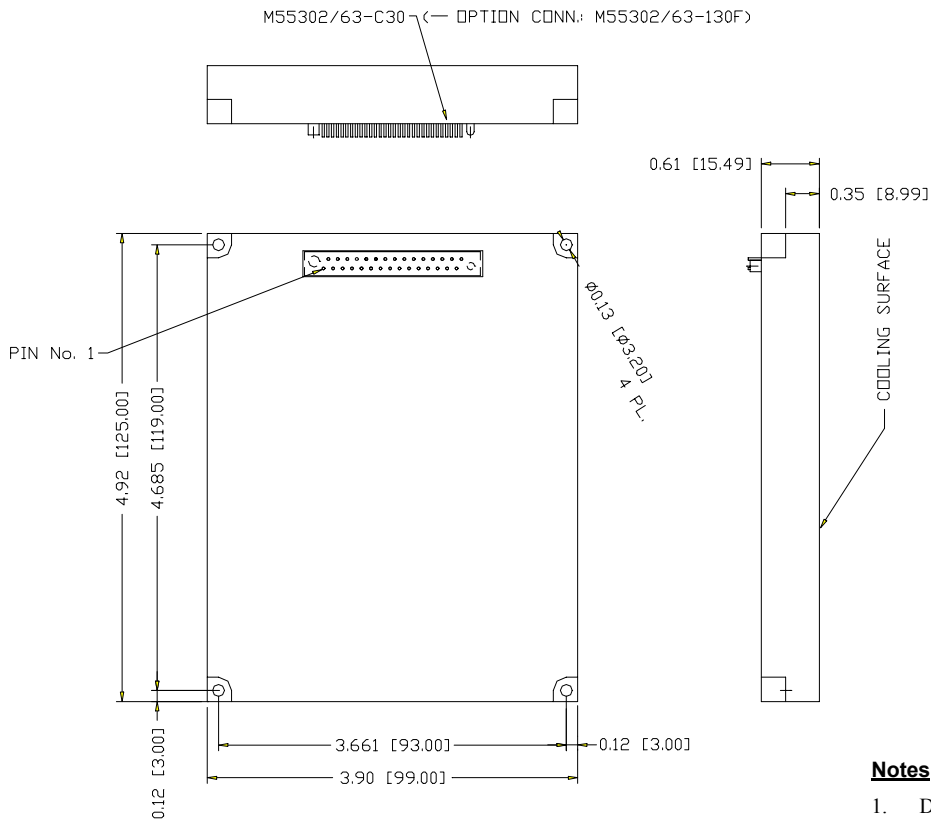
* Signal RTN for the INHIBIT and the SYN signals.

PIN ASSIGNMENT (SD – Side Connector)

PIN No.	PIN Function	PIN No.	PIN Function	PIN No.	PIN Function
1	+ OUT 1	11	SYN	21	+ OUT 2
2	- OUT 1	12	- VIN	22	- OUT 2
3	+ OUT 5	13	- VIN	23	+ OUT 3
4	+ OUT 6	14	+ VIN	24	- OUT 3
5	- OUT 4	15	+ VIN	25	INHIBIT
6	+ OUT 2	16	+ OUT 1	26	SIGNAL RTN *
7	- OUT 2	17	- OUT 1	27	- VIN
8	+ OUT 3	18	- OUT 5	28	- VIN
9	- OUT 3	19	- OUT 6	29	+ VIN
10	N.C.	20	+ OUT 4	30	+ VIN

* Signal RTN for the INHIBIT and the SYN signals.

OUTLINE DRAWING



Notes

1. Dimensions are in Inches [mm]
2. Tolerance is:
.XX ±.02 IN
.XXX ±.01 IN
3. Weight: 14 Oz (404 gr)
4. Add suffix SD to specify connector with guideset per M55302/63-130F (Side Connector)

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