

# High-Power CW Amplifier

## DM-HPSC-50-101



Specifications are subject to change without notice

### Electrical Specifications (+25°C)

Parameter	Value
Frequency	2 to 6 GHz
Small Signal Gain	50 dB min
Gain Var. OverTemp	-0.05 dB/°C typical
Psat @ 0dBm Input	46 dBm min
Psat @ 0dBm Input	50 W typical
Noise Figure	7 dB max
DC Power	28 VDC, 6 A nom at Psat
PAE	30 % typical
VSWR (Input/Output)	2.0:1/2.0:1 nom
Harmonics	-15 dBc typical @ Psat
Spurious	-70 dBc typical
Input Power Handling	15 dBm max
Mismatch Handling	5.0:1 max
Operation	CW

### Mechanical Specifications

Parameter	Value
Size (L x W x H)	2.5" x 2.75" x 0.45"
Connectors (In/Out)	SMA (f)/SMA (f)
Sealing	Hermetic
Finish	Grey Paint, Mounting surface Ni finish
Marking	Black per MIL-STD-130
Cooling	External heatsink

### Features

Parameter	Value
DC On/Off	1µs; TTL Logic-Low "0V": ON; High "5V": OFF
OverTemp Shutdown	at +90°C
Current Monitoring	Included

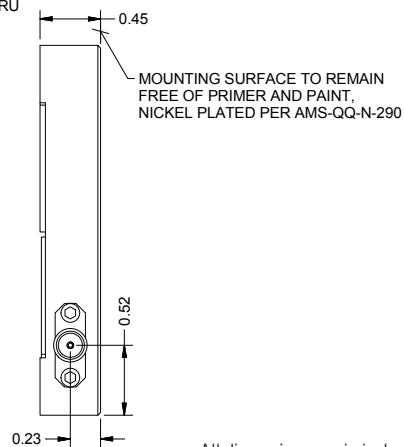
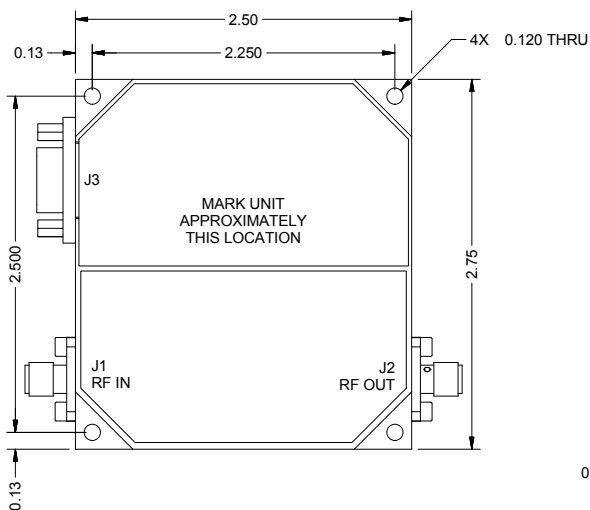
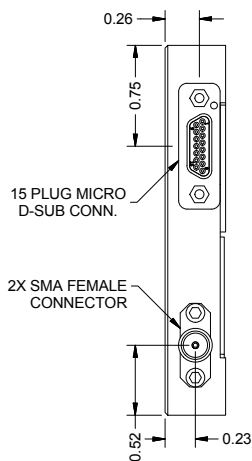
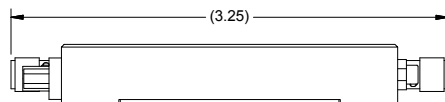
### Environmental Specifications (by design)

Parameter	Value
Operating Temperature	-40 to +85°C
Storage Temperature	-54 to +85°C
Relative Humidity	IAW MIL-STD-810F, up to 95%
Altitude	up to 30,000 ft
Vibration	IAW MIL-STD-810F, Method 514.5, Table 514.5-1
Shock	IAW MIL-STD-202G method 214, condition C
Salt Fog	5%, +35°C 96 hrs IAW MIL-STD- 810G method
Fungus	IAW MIL-STD-810G method 508.6



Outline Drawing

TABLE	
PIN #	DESCRIPTION
1	+28V
2	+28V
3	GND
4	GND
5	N/C
6	N/C
7	OVER-CURRENT BIT
8	BLANKING TTL
9	+28V
10	+28V
11	GND
12	GND
13	N/C
14	N/C
15	OVER-TEMP BIT



All dimensions are in inches

Need More Help? Need a Variant of This Product?

Contact Mercury's RF & Microwave engineering team at [rf.microwave@mercy.com](mailto:rf.microwave@mercy.com) or visit [www.mercy.com/rf](http://www.mercy.com/rf) for a detailed listing of RF and Microwave products.



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