

# GaN Power Amplifier

## DM-HPMB-40-101



Specifications are subject to change without notice

### Electrical Specifications (+25°C)

Parameter	Value
Frequency	6 to 18 GHz
Small Signal Gain	50 dB min
Gain Var. Over Temp	-0.05 dB/°C typical
Psat @ 5dBm Input	6-12 GHz > 44; 12-18 GHz > 42 dBm min
Psat @ 5dBm Input	30 W typical
Noise Figure	8 dB max
DC Power	28 VDC, 8 A nom at Psat
PAE	15 % typical
VSWR (Input/Output)	2.0:1/2.0:1 nom
Harmonics	-12 dBc typical @ Psat
Spurious	-70 dBc typical
Input Power Handling	15 dBm max
Mismatch Handling	5.0:1 max
Operation	CW

### Features

DC On/Off 1 $\mu$ s; TTL Logic-Low "0V": ON; High "5V": OFF  
 OverTemp Shutdown at +80°C  
 Current Monitoring Included

### 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

### Environmental Specifications (by design)

Parameter	Value
Operating Temperature	-40 to +70°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-I, Categories 12, 13, 14, 20
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

### Need More Help? Need a Variant of This Product?

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



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