

# GaN Power Amplifier DM-HPX-400-102



Specifications are subject to change without notice

## Electrical Specifications (+25°C)

Parameter	Value
Frequency	9.4 to 10.1 GHz
Small Signal Gain	50 dB min
Gain Var. Over Temp	-0.05 dB/°C typical
Psat	56 dBm min; 450 W typical
Noise Figure	8 dB max
DC Power	50 VDC, 3.5 A nom at Psat
PAE	30 % typical
VSWR (Input/Output)	2.0:1/1.5:1 nom
Harmonics	-15 dBc typical @ Psat
Spurious	-70 dBc typical
Input Power Handling	15 dBm max
Mismatch Handling	3.0:1 max
Operation	Pulse, 100 $\mu$ s, 10% d.c.

## Features

On/Off 1  $\mu$ s; TTL Logic-Low "0V": ON; High "5V": OFF  
 OverTemp Shutdown at +85°C  
 Current Monitoring Included

## Mechanical Specifications

Parameter	Value
Size (L x W x H)	7" x 4.5" x 1.65"
Connectors (In/Out)	SMA (f)/TNC (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 +80°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,
Shock	IAW MIL-STD-202G method 214, condition C
Salt Fog	5%, +35°C 96 hrs IAW MIL-STD-810G method 508.6
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.



Corporate Headquarters • 50 Minuteman Road • Andover, MA 01810 USA • (978) 967-1401 • (866) 627-6951 • Fax (978) 256-3599 • [www.mrcy.com](http://www.mrcy.com)

6946.00E-1018-SS-DM-HPX-400-102-amp