

# GaN Power Amplifier DM-HPSC-80-101

## Electrical Specifications (+25°C)

PARAMETER	UNITS
Frequency	2 to 6 GHz
Small Signal Gain	50 dB min
Gain Var. Over Temp	-0.05 dB/°C typical
Psat @ 0dBm Input	48 dBm min
Psat @ 0dBm Input	80 W typical
Noise Figure	7 dB max
DC Power	28 VDC, 12 A nom at Psat
PAE	25 % 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	UNITS
Size (L x W x H)	4.5" x 4.0" x 0.78"
Connectors (In/Out)	SMA (f)/N (f)
Sealing	Hermetic
Finish	Grey Paint, Mounting surface Ni finish
Marking	Black per MIL-STD-130
Cooling	External heatsink
Outline	001-0122

## Features

PARAMETER	UNITS
DC On/Off	1 $\mu$ s; TTL Logic-Low "0V": ON; High "5V": OFF
Over Temp Shutdown	at +90°C
Current Monitoring	Included

## Environmental Specifications (by design)

PARAMETER	UNITS
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-I,
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

## Classification

ECCN: EAR99

## Test Data

Gain, Psat, Noise Figure, VSWR, DC Power at +25°C