SPEC SHEET

GaN Power Amplifier
DM-HPX-250-102

Electrical Specifications (+25°C)

PARAMETER	UNITS
Frequency	9.4 to 10.1 GHz
Small Signal Gain	50 dB min
Gain Var. Over Temp	-0.05 dB/°C typical
Psat @ 0dBm Input	53 dBm min
Psat @ 0dBm Input	250 W typical
Noise Figure	8 dB max
DC Power	50 VDC, 1.8 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 µs, 10% d.c.

Mechanical Specifications

PARAMETER	UNITS
Size (L x W x H)	4.5" x 4.5" x 1"
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

Features

PARAMETER	UNITS
DC On/Off	1µs; TTL Logic-Low "0V": ON; High "5V": OFF
Over Temp Shutdown	at +85°C
Current Monitoring	Included

Environmental Specifications
(by design)

PARAMETER	UNITS
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
Fungus	IAW MIL-STD-810G method 508.6

Classification

ECCN: 3A001.b.4

Test Data

Gain, Psat, VSWR, DC Power at +25°C

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