

GaN Power Amplifier

DM-HPKU-20-101



Specifications are subject to change without notice

Electrical Specifications (+25°C)

Parameter	Value
Frequency	14.4 to 15.5 GHz
Small Signal Gain	45 dB min
Gain Var. Over Temp	-0.05 dB/°C typical
Psat @ -5dBm Input	41.5 dBm min
Psat @ -5dBm Input	15 W typical
P1dB	38 dBm min
Noise Figure	8 dB max
DC Power	28 VDC, 3.5 A nom at Psat
PAE	15 % typical
VSWR (Input/Output)	2.0:1/2.0:1 nom
Harmonics	-15 dBc typical @ Psat
Spurious	-70 dBc typical
Input Power Handling	5 dBm max
Mismatch Handling	5.0:1 max
Operation	CW

Features

DC On/Off 1 μ s; TTL Logic-Low "0V": ON; High "5V": OFF
 OverTemp Shutdown at +90°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 +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, 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 509.5
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 or visit 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

6949.00E-1018-SS-DM-HPKU-20-101-amp