

GaN Power Amplifier

DM-HPC-30-101



Specifications are subject to change without notice

Electrical Specifications (+25°C)

| Parameter | Value |
|----------------------|---------------------------|
| Frequency | 5.5 to 8.5 GHz |
| Small Signal Gain | 50 dB min |
| Gain Var. Over Temp | -0.05 dB/°C typical |
| Psat @ 0dBm Input | 44 dBm min |
| Psat @ 0dBm Input | 35 W typical |
| Noise Figure | 7 dB max |
| DC Power | 28 VDC, 3.5 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 |

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 inches |
| 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-I, |
| 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@mrcy.com or visit www.mrcy.com/rf for a detailed listing of RF and Microwave products.



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