



Part Number DM-HPKU-20-101

GaN Power Amplifier

Rev. B
03/16/2016

Electrical Specifications (+25°C):

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:	1µs; TTL Logic-Low "0V": ON; High "5V": OFF
Over Temp Shutdown:	at +90°C
Current Monitoring:	Included

Mechanical Specifications:

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
Outline:	001-0013

Classification:

ECCN:	ITAR
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Delta Microwave

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Delta Microwave's Quality Management System has been assessed by NSF-ISR and found to be in conformance with AS9100:2009, Rev. C. Delta Microwave reserves the right to change specifications without notice. Please verify specification revision upon order placement.



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Environmental Specifications (by design):

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, 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
Fungus:	IAW MIL-STD-810G method 508.6

Test Data:

Gain, P1dB, Psat, VSWR, DC Power at +25°C



Registered
to AS9100
(with ISO 9001)

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