WENTEQ MICROWAVE CORP

BROADBAND POWER AMPLIFIER
ABP0200-01-4038

Features:

- Broad band operation over 0.01 to 2.0GHz frequency range
- 8 Watt typical saturated output power
- Single positive DC power supply, unconditional stable
- SMA female connector I/O
- Operating temperature -40~+65°C, storage temperature -55~+85°C

General Description

ABP0200-01-4038 is a three stage broadband power amplifier with GaN transistor as the output power stage driven by GaAs MMIC devices, operating in the frequency from 10MHz to 2.0GHz. The amplifier provides 40dB of small signal gain and 38dBm typical staurated output power. The amplifier requires only a single positive DC power supply. Its built-in DC bias and sequential circuitry makes the amplifier easy to use.

Electrical Specifications

Parameters		Specifications		
		Minimum	Typical	Maximum
Frequency Range	MHz	10		2000
Nominal Gain @25°C base plate temperature	dB	37.0	40.0	43.0
Noise Figure	dB		3.5	5.0
P-1dB Compression Point estimated	dBm	+32.0	+33.0	
Saturated Output Power (~5dB compression)	dBm	+37.0	+38.0	
Output IP3	dBm	+37.0	+40.0	
Gain flatness	dB		+/-1.5	+/-2.0
Gain Variation over Temperature Range	dB		+/-2.0	
Reverse Isolation	dB	60.0		
Input VSWR	-		1.8:1	2.2:1
Output VSWR	-		1.8:1	2.5:1
Spurious	dBc			-60.0
Operating Temperature	°C	-40.0		+75.0
Survival Temperature	°C	-45.0		+125.0
DC Power Supply Voltage	V	+26.0	+28.0	+29.0
Quiescent DC Current	mA		250.0	350.0
DC Current at Saturation	mA		800.0	1100.0
RF In/Out connectors		SMA Female Connectors		
DC Input Connector		Feedthru Pin		
Size	inches	2.60×2.0×0.65		

Note: External heat sink required for normal operation!!!

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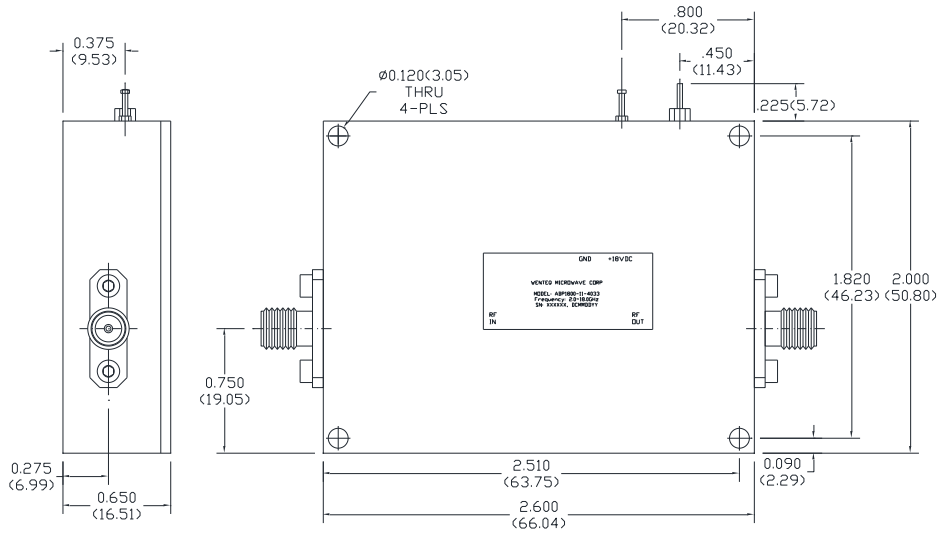
Mechanical Structure:



Note: All units in inches (mm).

Housing Material and Surface Finish:

Body and cover material: aluminum
Surface finish: Nickel plated
Connector material: Stainless steel
Connector surface finish: passivated

Absolute Maximum Ratings

DC Voltage	+30V
RF Input Power	15 dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+75°C