

**Features:**

- Broad band medium power output amplifier
- Low VSWR, unconditional stable
- K female connector RF I/O
- Single DC power supply required
- Operating temperature -40~+75°C, storage temperature -45~+85°C

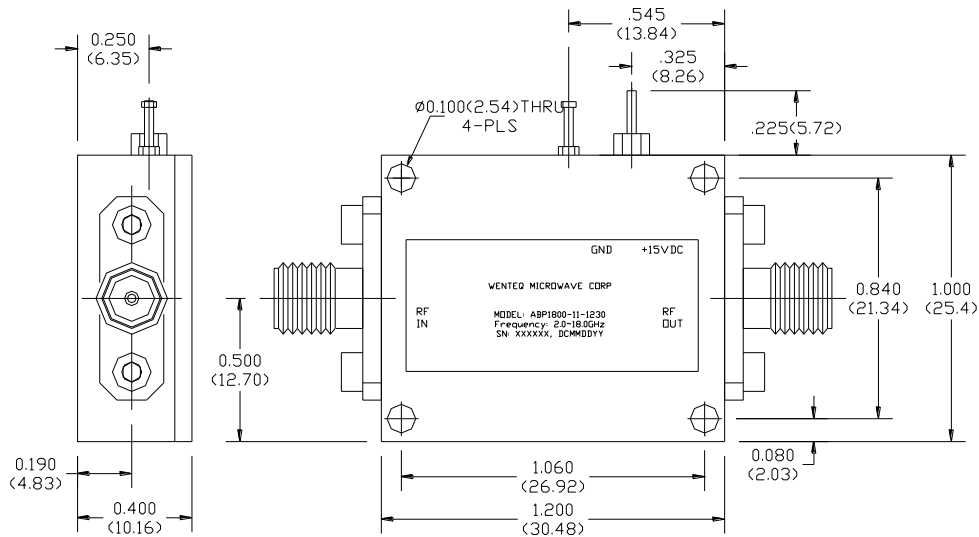
**General Description**

ABP4000-50-2020 is a one stage MMIC based broadband power amplifier module operating in the frequency of 20.0 to 40.0GHz. The amplifier provides 20dB of flat small signal gain, +20dBm of typical output power at 1dB gain compression. The amplifier requires only a single positive DC power supply, its built-in DC voltage regulator and internal sequencing circuitry makes the application more robust.

**Electrical Specifications**

Parameters		Specifications		
		Minimum	Typical	Maximum
Frequency Range	GHz	20.0		40.0
Nominal Gain @25°C base plate temperature	dB	18.0	20.0	23.0
P-1dB Compression Point	dBm	19.0	20.0	
Psat at Output	dBm	20.0	22.0	
Gain flatness	dB		+/-1.0	+/-1.5
Gain Variation over Temperature Range	dB		+2.0/-3.0	
Reverse Isolation	dB	30.0		
Input VSWR	-		1.7:1	2.2:1
Output VSWR	-		1.8:1	2.5:1
Spurious	dBc			-65.0
Operating Temperature	°C	-40.0		+75.0
Survival Temperature	°C	-45.0		+85.0
DC Power Supply Voltage	V	+8.0	+12.0	+15.0
DC Power Supply Current	mA	150.0	190.0	250.0
RF In/Out connectors		50 ohm K female		
DC Input Connector		Feedthru Pin		
Size	inches	1.20×1.0×0.4		

**Mechanical Structure:**



Note: All units in inches.

**Absolute Maximum Ratings**

DC Voltage	+18V
RF Input Power	+18 dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+85°C