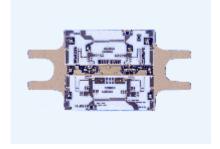
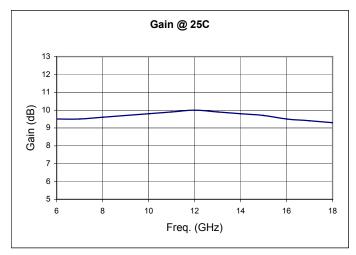


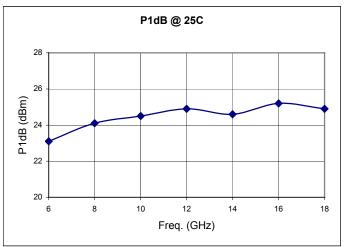
6 to 18 GHz Balanced Amplifier Module (Preliminary)



Features:

- 24.0 dBm Typ P1dB
- 9.5 dB Typ Small Signal Gain
- 1.7:1 Typ VSWR
- 33 dBm Typ IP3



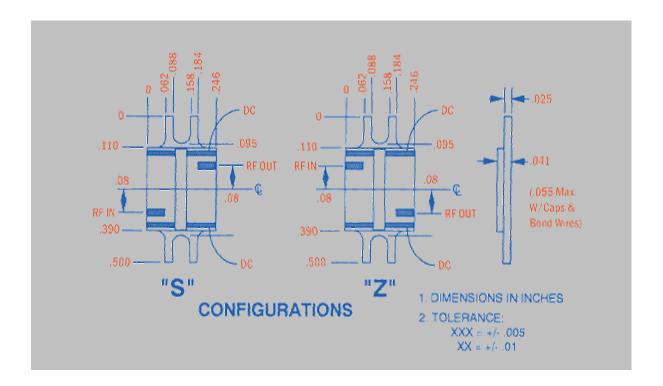


Specifications

■ Electrical at 25°C, Vdd = 8.0 V, Zo = 50 ohms

SYMBOL	PARAMETERS	Unit	Min	Тур	Max
FREQ	Frequency Range	GHz	6.0		18.0
SSG	Small Signal Gain	dB	9.0	9.5	
GOF	SSG Flatness	+/- dB		0.5	1.0
GOT	SSG Variation over Temperature	dB/°C		-0.012	
P-1dB	Output Power at 1 dB Compression	dBm	21.0	24.0	
PSAT	Output Power at 6 dB Compression	dBm		25.0	
P-1/T	P-1dB Variation over Temperature	dB/°C		-0.008	
IP3	Third Order Intercept Point	dBm		33.0	
2 nd HAR	2 nd Harmonic @ Pout=24 dBm	dBc		-21	
NF	Noise Figure	dB		5.5	7.0
VSWR	Input/Output VSWR			1.7:1	2.0:1
ISO	Reverse Isolation	dB		-17.0	
VDD	Power Supply Voltage	+V	7.9	8.0	8.1
IDD	Small Signal Module Current	mA		110	150





Construction:

The 15 mil alumina substrates and 10 mil Cu FET ridge are brazed onto the 25 mil carrier using AuGe preform. The GaAs FETs are attached to the Cu ridge using AuSn preform. All capacitors are attached using AuSn preforms. The flanges are designed to accommodate 0-80 UNF-2A socket or Fillister head screws on .400 center-to-center hole spacing. The modules are mechanically and electrically designed to be cascaded.

Notes:

- 1. Custom module specifications and/or custom module mechanical configurations are available.
- 2. OPERATING TEMPERATURE RANGE IS -55° C to +105° C.
- 3. All modules are serialized and shipped with data measured at 25° C. Data includes swept small signal gain, swept input and output return loss. Noise figure and P-1dB are measured in 1 GHz increments. Special module testing is available.
- 4. Test fixtures are available.
- **5.** MicroWave Technology reserves the right to ship modules with performance above the typical specifications.