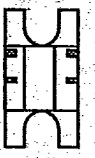
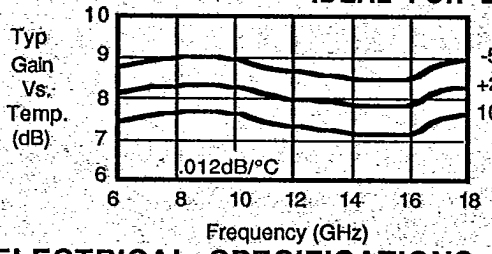
MwT-0618-102G
6-18 GHz
MMIC AMPLIFIER MODULE

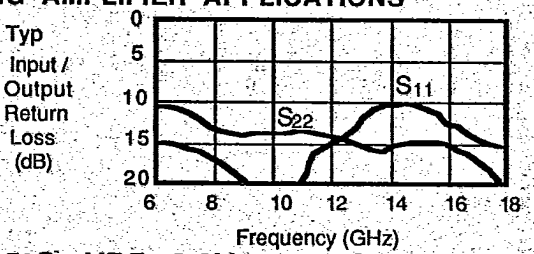
MICROWAVE TECHNOLOGY 4268 Solar Way Fremont, CA 94538 415-651-6700 FAX 415-651-2208

T-74-13-01



- 8.0 dB TYPICAL SMALL SIGNAL GAIN
- 1.9:1 TYPICAL VSWR
- 16 dBm TYPICAL P1dB
- ±0.5 dB TYPICAL OUTPUT POWER FLATNESS
- -16 dBc TYPICAL SECOND HARMONICS AT Psat
- SINGLE SUPPLY BIAS
- CENTER FEED CONFIGURATION
- IDEAL FOR LIMITING AMPLIFIER APPLICATIONS





ELECTRICAL SPECIFICATIONS (Ta=25°C, VDD=8.0V, 6-18 GHz)

MwT-0618-102G-GFP (Model Number)

GAIN (dB)

"G"	MIN	TYP
-6	6	7
-7	7	8

GAIN FLATNESS (±dB)

"F"	TYP	MAX
-7	0.6	0.75
-1	0.75	1.0

P1dB (dBm) IDD (mA)

"P"	MIN	TYP	TYP	MAX
-1	11	12	35	40
-3	13	14	45	60
-5	15	16	60	100
-7	17*	18	100	120

Example: MwT-0618-102G -713 = 7 dB Gain, ±1.0 dB Gain Flatness, +13 dBm P1dB *VDD 10 volts DC

SYMBOL	PARAMETERS	UNITS	MIN	TYP	MAX
FREQ	Frequency Range	GHz	6.0		18.0
VSWR, IN	Input VSWR	—		1.9:1	2.0:1
VSWR, OUT	Output VSWR	—		1.7:1	2.0:1
NF	Noise Figure	dB		7.5	8.5
ISO	Reverse Isolation	dB		30	

NOTES:
1. Operating temperature range is -55 °C to +105 °C
2. MicroWave Technology reserves the right to ship modules with gain and / or power above the typical specification of the model number.
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 in 2 GHz increments, and P1dB in 2 GHz increments.
4. Test fixtures are available. Contact MwT for details.

9000-1439

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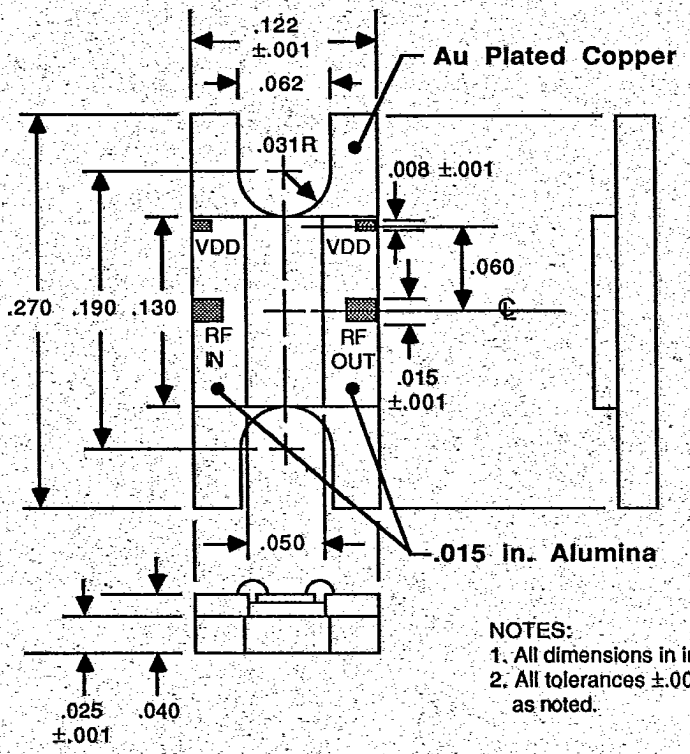
MODULE OUTLINES



NOTES:
1. All dimensions in inches.
2. All tolerances ±.002 except as noted.

CONSTRUCTION

The 15 mil alumina substrates and Cu ridge are brazed onto the 25 mil Cu carrier using high temperature Au eutectic. The GaAs MMICs (standard 5 mil thickness) is attached to the Cu ridge using AuSn preform. All capacitors are attached using AuSn preforms. The flanges are designed to accommodate 0-80 socket head screws. The modules are mechanically and electrically designed to be directly cascaded.

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