



MwT-0208-101DG

2-8 GHz

MMIC AMPLIFIER MODULE

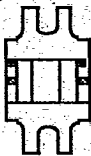
MICROWAVE TECHNOLOGY

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

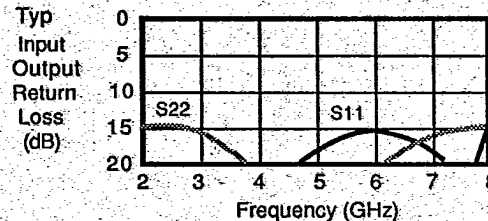
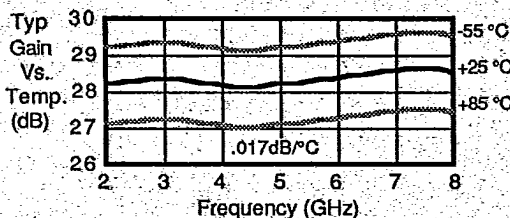
MICROWAVE TECHNOLOGY

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T-74-13-01



- 30 dB TYPICAL SMALL SIGNAL GAIN
- 1.5:1 TYPICAL INPUT AND OUTPUT VSWR
- 45 dB TYPICAL REVERSE ISOLATION
- ± 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, 2-8 GHz)

MwT-0208-101DG-GFP (Model Number)

GAIN (dB)			GAIN FLATNESS ($\pm$ dB)			P1dB (dBm)			IDD (mA)	
"G"	MIN	TYP	"F"	TYP	MAX	"P"	MIN	TYP	TYP	MAX
-4	24	26	-7	0.6	0.75	-1	11	12	70	80
-6	26	28	-1	0.75	1.0	-3	13	14	80	100
-8	28	30				-7*	17	18	150	200
						-9*	19	20	200	250

Example: MwT-0208-101DG-673 = 26 dB Gain, ± 0.75 dB Gain Flatness, +13 dBm P1dB * VDD 10 VOLTS DC

SYMBOL	PARAMETERS	UNITS	MIN	TYP	MAX
FREQ	Frequency Range	GHz	2.0		8.0
VSWR, IN	Input VSWR	—		1.5:1	1.7:1
VSWR, OUT	Output VSWR	—		1.5:1	1.7:1
NF	Noise Figure	dB		6.5	7.0
ISO	Reverse Isolation	dB		45	

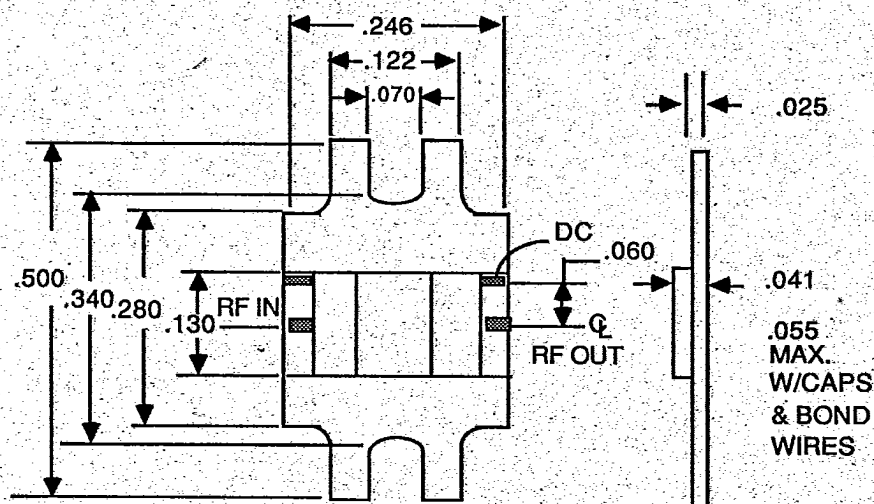
NOTES:

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 1 GHz increments, and P1 dB in 1 GHz increments.
4. Test fixtures are available. Contact MwT for details.

9000-1438

T-74-13-01

MODULE OUTLINES



CONFIGURATIONS

1. DIMENSION IN INCHES
2. TOLERANCE:
XXX = +/- .005
XX = +/- .01

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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