

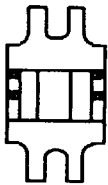


MwT-0208-101DG

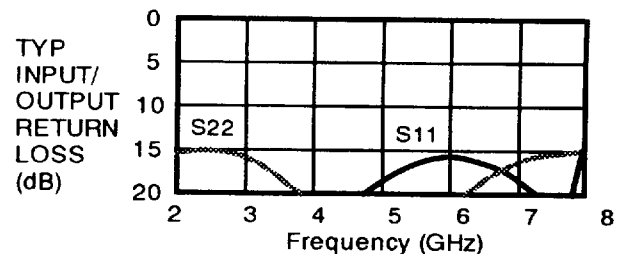
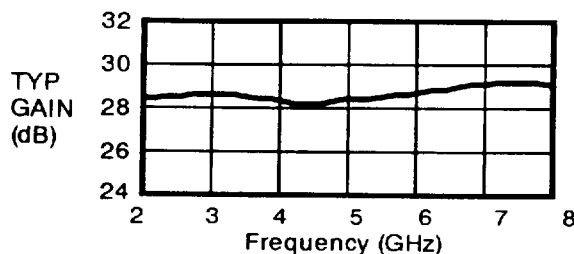
2-8 GHz

MMIC AMPLIFIER MODULE

MICROWAVE TECHNOLOGY 4268 Solar Way Fremont, CA 94538 510-651-6700 FAX 510-651-2208



- 28 dB TYPICAL SMALL SIGNAL GAIN
- 1.5:1 TYPICAL INPUT AND OUTPUT VSWR
- 45 dB TYPICAL REVERSE ISOLATION
- ± 0.6 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	VDD	TYP	MAX
-4	24	26	-7	0.6	0.75	-1	11	12	8	70	90
-6	26	28	-1	0.75	1.00	-3	13	14	8	90	110
-8	28	30				-6	16	17	10	150	200

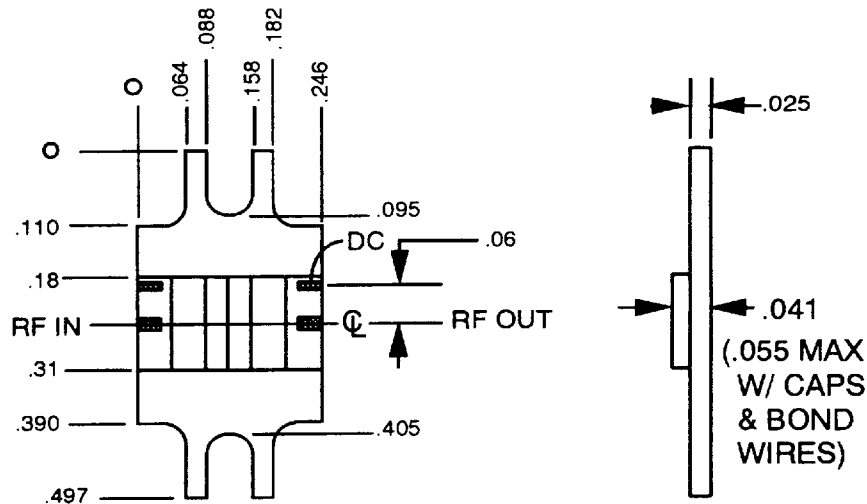
Example: MwT- 0208-101DG -673 = 26 dB Gain, ± 0.75 dB Gain Flatness, +13 dBm P1dB

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
$\Delta G/\Delta T$	Gain Variation With Temperature	2 GHz 8 GHz		-0.035 -0.040	
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.

MODULE OUTLINES



1. DIMENSIONS IN INCHES

2. TOLERANCE:

XXX = +/- .005

XX = +/- .01

CONSTRUCTION:

The 15 mil alumina substrates and 10 mil copper FET ridge are brazed onto the 25 mil carrier using AuGe preform. The GaAs MMICs 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.

4268 Solar Way Fremont, CA 94538 510-651-6700 FAX 510-651-2208

10/22/91

All rights reserved. MicroWave Technology, Inc. All specifications subject to change without notice.

- M30 -

2