



MwT-0218-102DG

2-18 GHz

MMIC AMPLIFIER MODULE

MICROWAVE TECHNOLOGY

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

MICROWAVE TECHNOLOGY

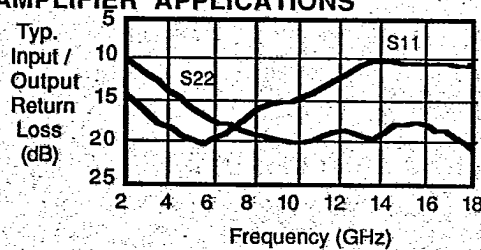
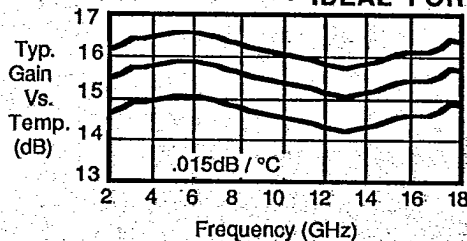
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T-74-13-01



- 15 dB TYPICAL SMALL SIGNAL GAIN
- 1.9:1 TYPICAL VSWR
- 30 dB TYPICAL REVERSE ISOLATION
- ± 0.8 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, 2-18 GHz)

MwT-0218-102DG-GFP (Model Number)

GAIN (dB)			GAIN FLATNESS ($\pm$ dB)			P1dB (dBm)			IDD (mA)	
"G"	MIN	TYP	"F"	TYP	MAX	"P"	MIN	TYP	TYP	MAX
-3	13	14	-3	0.6	0.75	-1	11	12	70	90
-4	14	15	-1	0.75	1.0	-3	13	14	90	105
						-5	15	16	105	160
						-7*	17	18	160	200

Example: MwT-0218-102DG-413 = 14 dB Gain, ± 1.0 dB Gain Flatness, +13 dBm P1dB *VDD 10 volts DC

SYMBOL	PARAMETERS	UNITS	MIN	TYP	MAX
FREQ	Frequency Range	GHz	2.0		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	

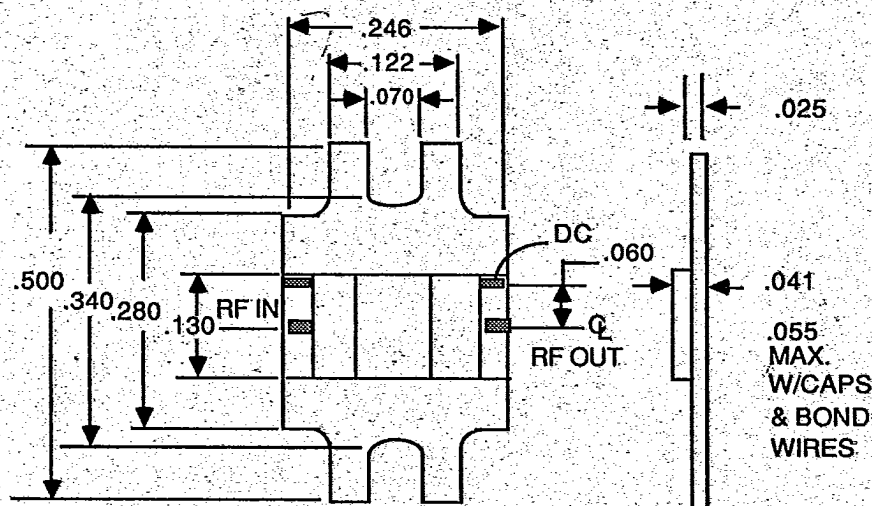
NOTES:

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.

9000-1442

T-74-13-01

MODULE OUTLINES



1. DIMENSION IN INCHES

2. TOLERANCE:
 XXX = +/- .005
 XX = +/- .01

CONFIGURATIONS

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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