

RF AMPLIFIER

MODEL *TM3058*

Available As: TM3058, 4 Pin TO-8 (T4)
 TN3058, 4 Pin Surface Mount (SM3)
 BX3058, Connectorized Housing (H1)

Features

- Low Noise Figure: 3.0 dB Typical
- High Gain: +24.5 dB Typical
- Operating Temp. -55 °C to + 85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	450 - 950 MHz	450 - 950 MHz
Gain (dB)	24.5	23.0 Min.
Power @ 1 dB Comp. (dBm)	+11.5	+10.0 Min.
Reverse Isolation (dB)	-13	-12 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.75:1	2.0:1 Max.
Noise Figure (dB)	3.3	4.5 Max.
Power Vdc	+5	+5
mA	45	48 Max.

Note: Care should always be taken to effectively ground the case of each unit.

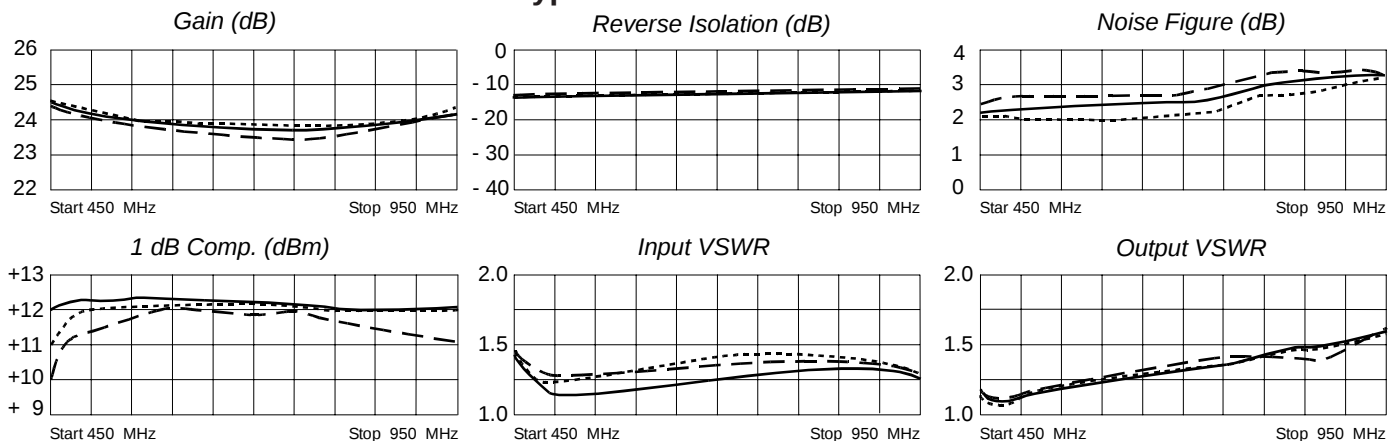
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.... +43 dBm (Typ.)
 Second Order Two Tone Intercept Point.... +37 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +23 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 8 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power..... 0.5 Watt (3 µsec Max.)

Typical Performance Data



Legend ——— + 25 °C - - - + 85 °C -55 °C

Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
450	.02	140	17.17	-105	.0227	4	.16	144
500	.03	117	17.22	-117	.0234	4	.16	135
550	.02	116	17.25	-130	.0242	1	.16	127
650	.01	92	17.08	-154	.0253	-4	.15	114
750	.02	-140	17.16	-179	.0256	-8	.13	109
850	.08	-144	17.25	155	.0293	-8	.12	111
950	.14	-167	17.32	128	.0289	-11	.13	122

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