

# RF AMPLIFIER

## MODEL *TM3065*

Available as: TM3065, 4 Pin TO-8 (T4)  
 TN3065, 4 Pin Surface Mount (SM3)  
 BX3065, Connectorized Housing (H1)

### Features

- High Gain: 28 dB Typical
- Output Power: +15 dBm 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	5 - 200 MHz	5 - 200 MHz
Gain (dB)	28	26 Min.
Power @ 1 dB Comp. (dBm)	+15	+14 Min.
Reverse Isolation (dB)	-34	-33 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	5.5	6.0 Max.
Power Vdc	+15	+15
mA	63	68 Max.

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

### Typical Intermodulation Performance at 25 °C

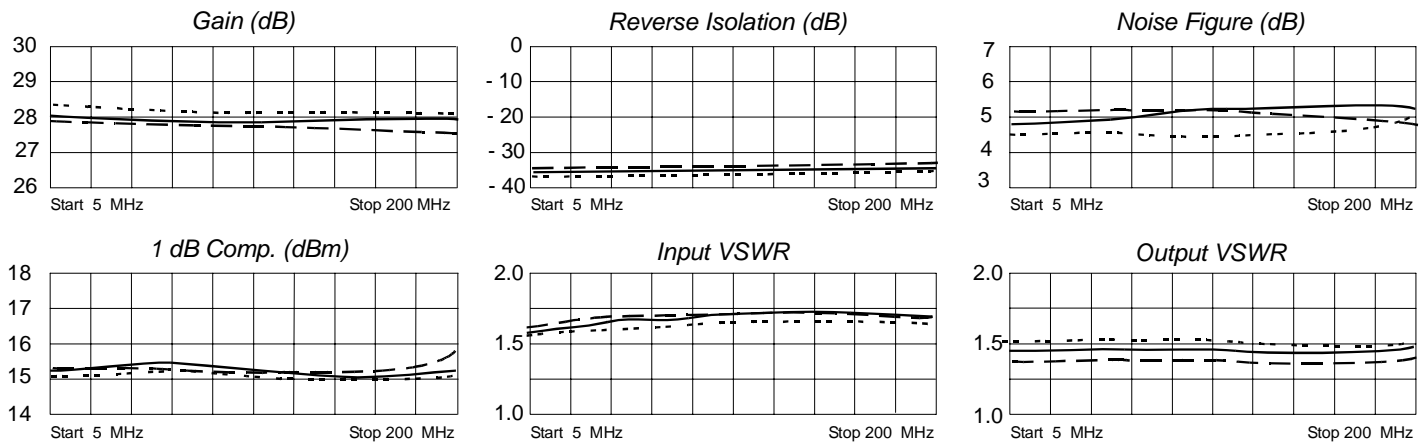
Second Order Harmonic Intercept Point ..... +56 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +52 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +30 dBm (Typ.)

### Maximum Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
 Storage Temperature ..... -62°C to + 125 °C  
 Case Temperature ..... + 125 °C  
 DC Voltage ..... + 18 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.)

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

### Typical Performance Data



### Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.09	4	27.20	7	.0112	7	.12	21
15	.09	-3	26.92	-4	.0134	8	.13	7
25	.08	0	26.83	-8	.0163	-2	.13	-2
50	.08	-3	26.70	-18	.0117	-3	.13	-10
100	.08	3	26.78	-37	.0143	-3	.13	-28
150	.08	6	27.02	-56	.0142	-10	.12	-45
200	.07	9	27.36	-75	.0157	-16	.12	-61

