

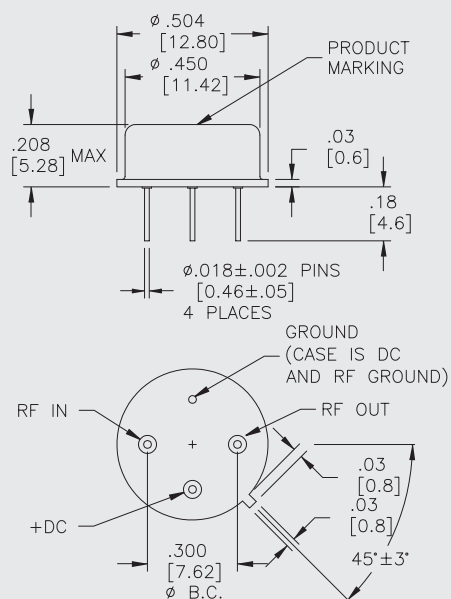
10 TO 3000 MHz TO-8 CASCADABLE AMPLIFIER

AC3055

Ultra Broad Bandwidth	10-3000 MHz
Low Noise Figure above 1.0 GHz	< 3.0 dB
Medium Output Power	+17.5 dBm
High Performance Thin Film	
Standard Size TO-8 Package	

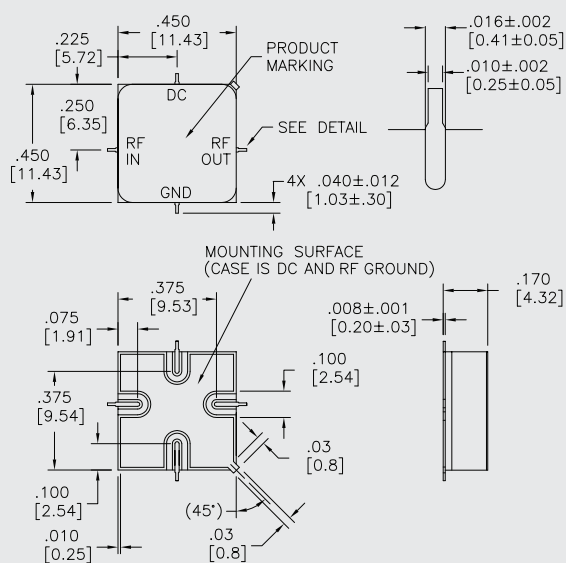
AC3055

TO-8 Package for Amplifiers



AS3055

SMT0-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES [MILLIMETERS]

INTERMODULATION PERFORMANCE

AC3055

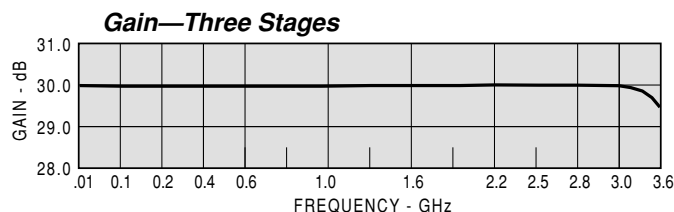
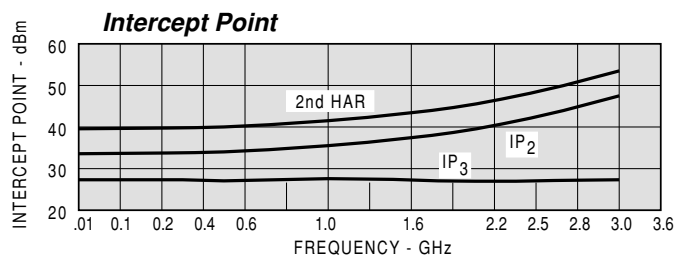
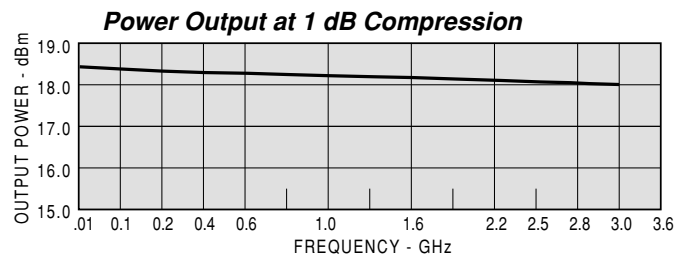
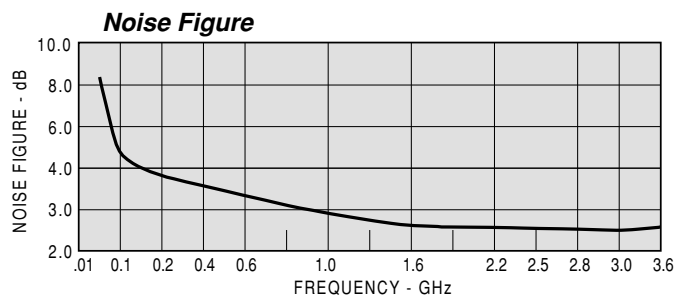
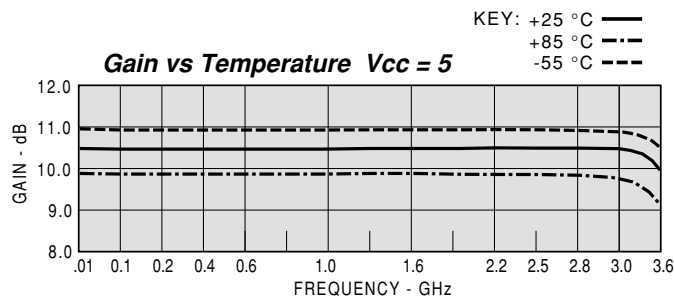
Second Order Harmonic Intercept Point	+41 dBm
Second Order Two Tone Intercept Point	+35 dBm
Third Order Two Tone Intercept Point	+27 dBm

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+8 Volts
Maximum Continuous RF Input Power	+20 dBm
Maximum Short Term Input Power (1 Minute Max.)	500 Milliwatts
Maximum Peak Power (3 μsec Max.)	1.0 Watt
Burn-in Temperature	+105 °C
Thermal Resistance¹ (θjc)	+66 °C/Watt
Junction Temperature Rise Above Case (Tic)	+19.8 °C

¹Thermal resistance is based on total power dissipation.

TYPICAL PERFORMANCE



TYPICAL AUTOMATIC TEST DATA

Model: AC3055				Vcc= +5V			lcc= 58.84
FREQ	SWR	SWR	GAIN	PHASE	DELAY	REV/ISO	
MHZ	IN	OUT	DB	DEG	NSEC	DB	
10	1.83	1.26	10.64	-155		-17.8	
50	1.51	1.14	10.81	-178	0.86	-18.0	
100	1.50	1.14	10.82	176	0.30	-18.0	
200	1.48	1.14	10.87	169	0.21	-18.0	
400	1.45	1.14	10.95	155	0.20	-18.1	
600	1.42	1.13	10.94	141	0.19	-18.2	
800	1.43	1.10	10.95	128	0.18	-18.2	
1000	1.45	1.07	10.93	114	0.18	-18.3	
1200	1.44	1.06	10.96	101	0.19	-18.3	
1400	1.45	1.10	10.95	87	0.19	-18.4	
1600	1.49	1.17	10.89	73	0.19	-18.3	
1800	1.54	1.26	10.78	60	0.18	-18.3	
2000	1.53	1.34	10.64	46	0.19	-18.5	
2200	1.51	1.44	10.50	32	0.20	-18.5	
2400	1.47	1.53	10.43	19	0.17	-18.5	
2600	1.36	1.59	10.36	4	0.22	-18.3	
2800	1.27	1.62	10.41	-10	0.26	-18.1	
3000	1.15	1.64	10.50	-24	0.19	-17.8	
3200	1.60	1.65	10.23	-40	0.21	-17.8	
3300	1.14	1.64	10.21	-48	0.23	-17.7	

Model: AC3055				Vcc= +5V			lcc= 58.84
FREQ.	S11		S21		S12		S22
MHZ	MAG	ANG	MAG	ANG	MAG	ANG	MAG
10	0.29	-38.0	3.40	-154.8	0.129	18.6	0.12
50	0.20	-13.3	3.47	-178.3	0.126	1.5	0.07
100	0.20	-12.3	3.48	176.3	0.126	-1.9	0.07
200	0.19	-15.9	3.50	168.7	0.126	-5.7	0.06
400	0.18	-24.5	3.53	154.6	0.124	-12.9	0.07
600	0.18	-33.8	3.52	141.1	0.122	-19.1	0.06
800	0.18	-44.2	3.53	127.7	0.123	-25.5	0.05
1000	0.18	-53.5	3.52	114.4	0.121	-31.8	0.03
1200	0.18	-62.8	3.53	100.9	0.121	-37.9	0.03
1400	0.18	-73.2	3.53	87.2	0.121	-45.3	0.05
1600	0.20	-85.4	3.50	73.4	0.121	-51.4	0.08
1800	0.21	-95.0	3.46	59.8	0.121	-58.2	0.11
2000	0.21	-108.5	3.41	45.8	0.119	-66.2	0.14
2200	0.20	-122.5	3.35	32.2	0.118	-72.7	0.18
2400	0.19	-133.5	3.32	19.3	0.120	-79.0	0.21
2600	0.15	-146.4	3.29	4.4	0.121	-86.3	0.23
2800	0.12	-163.7	3.31	-10.1	0.124	-93.8	0.24
3000	0.07	-177.7	3.35	-23.6	0.129	-102.3	0.24
3200	0.03	72.3	3.25	-40.0	0.129	-110.6	0.25
3300	0.06	34.5	3.24	-48.1	0.131	-114.8	0.24

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