

SILICON BIPOLAR MONOLITHIC AMPLIFIERS

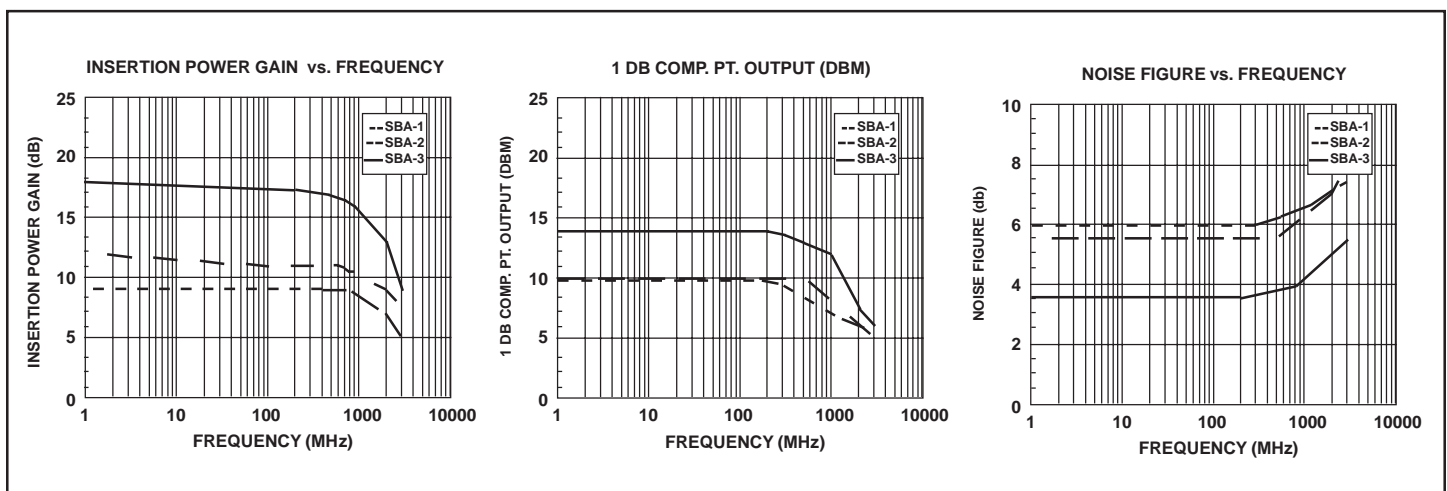
ELECTRICAL SPECIFICATIONS

196



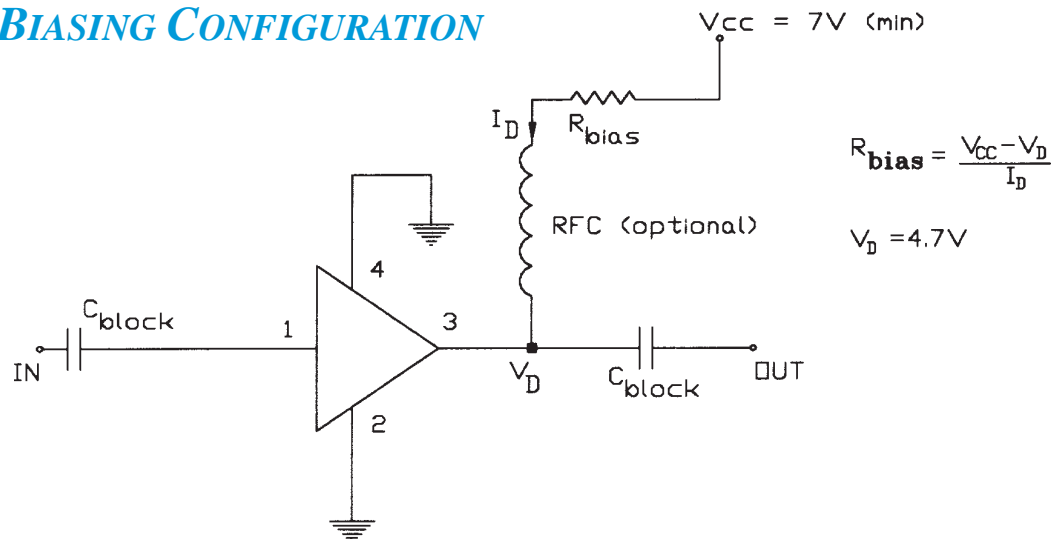
MODEL	SBA-1	SBA-2	SBA-3
Operating Frequency:	DC - 2000 MHz	DC - 2000 MHz	DC - 2000 MHz
Gain (dB):			
100 MHz:	Typ 9.0 Min 7.0	Typ 11.0 Min 10.5	Typ 18.0 Min 12.0
500 MHz:	9.0 7.0	10.5 10.0	16.5 11.0
1000 MHz:	8.5 6.5	9.5 9.0	15.0 10.0
2000 MHz:	6.8 5.5	7.8 6.0	10.0 7.5
Typical Output 1 dB Comp Pt.:			
100 MHz:	+12 dBm	+9 dBm	+14.8 dBm
500 MHz:	+12 dBm	+9 dBm	+13.7 dBm
1000 MHz:	+9.5 dBm	+8.5 dBm	+11.8 dBm
2000 MHz:	+6.5 dBm	+8.0 dBm	+10.5 dBm
Typical VSWR:			
100 MHz:	Input 1.3:1 Output 1.5:1	Input 1.3:1 Output 1.5:1	Input 1.1:1 Output 1.5:1
500 MHz:	1.3:1 1.5:1	1.3:1 1.5:1	1.2:1 1.5:1
1000 MHz:	1.3:1 1.5:1	1.3:1 1.5:1	1.2:1 1.5:1
2000 MHz:	1.3:1 1.5:1	1.3:1 1.5:1	1.3:1 1.5:1
Typical Noise Figure:			
100 MHz:	6.0 dB	5.5 dB	3.5 dB
500 MHz:	6.2 dB	6.0 dB	3.5 dB
1000 MHz:	6.5 dB	6.2 dB	4.0 dB
2000 MHz:	7.0 dB	7.0 dB	5.0 dB

TYPICAL PERFORMANCE CHARACTERISTICS

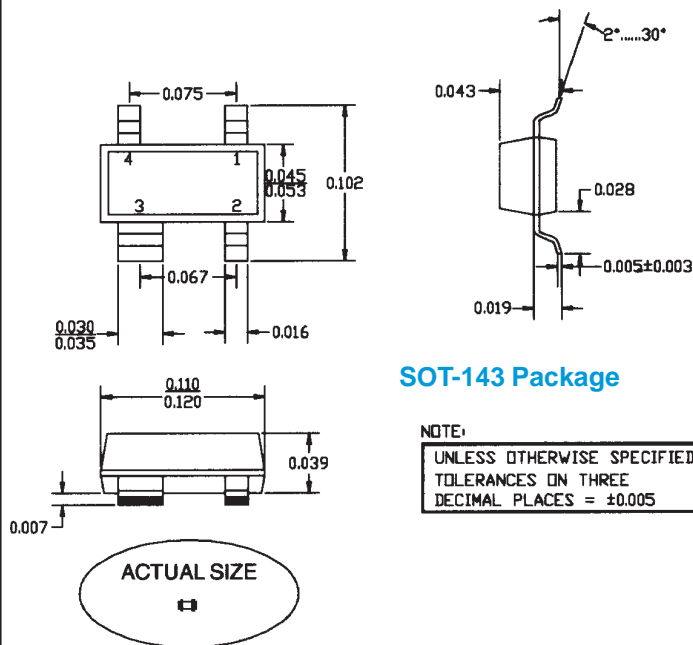


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TYPICAL BIASING CONFIGURATION



MECHANICAL OUTLINE



MAXIMUM RATINGS

Parameter	Symbol	Unit
Device Current	I_D	60 mA
Total Power Dissipation, $T_s < 99^\circ C$	P_{tot}	250 mW
RF Input Power	P_{RFin}	10 dBm
T_s = Case Temperature		
Junction Temperature	T_j	150°C
Ambient Temperature	T_A	-45 to +85°C
Storage Temperature	T_{stg}	-65 to +150°C