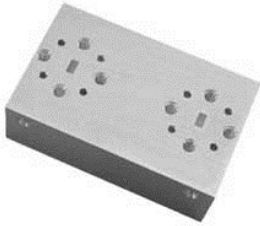


Broad Bandwidth, General Purpose Amplifiers, SBB Series



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FEATURES:

- ◆ Frequency coverage: 2 to 96 GHz
- ◆ High output power
- ◆ Superior gain flatness
- ◆ Single positive DC power supply
- ◆ Standard temperature range: -10 to +60 °C

APPLICATIONS:

- ◆ Engineering prototypes
- ◆ EW systems
- ◆ Test instrumentations
- ◆ Power boosters

DESCRIPTION:

SBB series broad bandwidth, general purpose amplifiers are designed and manufactured by utilizing the most advanced discrete PHEMT or MMIC devices and thin film technologies to cover the frequency range of 2 to 96 GHz. With improved DC power supply and advanced semiconductor technologies, these amplifiers deliver not only high power output, but also superior gain flatness and low noise performance. The amplifiers are divided into two categories, namely, catalog and custom designed. While catalog models focus on general purpose operation with broad operation bandwidth for general applications, custom designed models are optimized to meet customers' specific needs.

CATALOG MODELS:

Model Number	Frequency Range (GHz)	Gain (dB)	Gain Flatness (±dB)	P-1 dB (dBm)	VSWR (Typ)	Bias (V/mA)	Outlines
SBB-0230832017-SFSF-S1	2.0 to 8.0	20	1.5	17	2:1	+10.0/180	BG-C1, BG-N1, BG-W1
SBB-0230833017-SFSF-S1	2.0 to 8.0	30	2.0	17	2:1	+10.0/250	BG-C1, BG-N1, BG-W1
SBB-0230832022-SFSF-S1	2.0 to 8.0	20	1.5	22	2:1	+10.0/400	BG-C1, BG-N1, BG-W1
SBB-0230833022-SFSF-S1	2.0 to 8.0	30	2.0	22	2:1	+10.0/450	BG-C1, BG-N1, BG-W1
SBB-0230832027-SFSF-S1	2.0 to 8.0	20	1.5	27	2:1	+10.0/700	BG-C1, BG-N1, BG-W1
SBB-0230833027-SFSF-S1	2.0 to 8.0	30	2.0	27	2:1	+10.0/800	BG-C1, BG-N1, BG-W1
SBB-0231831520-SFSF-S1	2.0 to 18.0	15	1.5	20	2:1	+10.0/150	BG-C1, BG-N1, BG-W1
SBB-0231833020-SFSF-S1	2.0 to 18.0	30	2.0	20	2:1	+10.0/250	BG-C1, BG-N1, BG-W1
SBB-0231832022-SFSF-S1	2.0 to 18.0	20	2.5	22	2:1	+10.0/600	BG-C1, BG-N1, BG-W1
SBB-0231833022-SFSF-S1	2.0 to 18.0	30	3.0	22	2:1	+10.0/700	BG-C1, BG-N1, BG-W1
SBB-0631832017-SFSF-S1	6.0 to 18.0	20	2.0	17	2:1	+10.0/200	BG-C1, BG-N1, BG-W1
SBB-0631833017-SFSF-S1	6.0 to 18.0	30	2.0	17	2:1	+10.0/250	BG-C1, BG-N1, BG-W1
SBB-0631832023-SFSF-S1	6.0 to 18.0	20	2.3	23	2:1	+10.0/650	BG-C1, BG-N1, BG-W1
SBB-0631833023-SFSF-S1	6.0 to 18.0	30	2.5	23	2:1	+10.0/750	BG-C1, BG-N1, BG-W1
SBB-0631832023-SFSF-S1	6.0 to 18.0	20	3.0	27	2:1	+10.0/900	BG-C1, BG-N1, BG-W1
SBB-0631833023-SFSF-S1	6.0 to 18.0	30	3.2	27	2:1	+10.0/950	BG-C1, BG-N1, BG-W1

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Model Number	Frequency Range (GHz)	Gain (dB)	Gain Flatness (\pm dB)	P-1 dB (dBm)	VSWR (Typ)	Bias (V/mA)	Outlines
SBB-1832732513-KFKF-S1	18.0 to 26.5	25	2.0	13	2:1	+10.0/200	BG-C1, BG-N1, BG-W1
SBB-1832733513-KFKF-S1	18.0 to 26.5	35	2.3	13	2:1	+10.0/300	BG-C1, BG-N1, BG-W1
SBB-1832733020-KFKF-S1	18.0 to 26.5	30	2.0	20	2:1	+10.0/600	BG-C1, BG-N1, BG-W1
SBB-1832734020-KFKF-S1	18.0 to 26.5	40	2.5	20	2:1	+10.0/650	BG-C1, BG-N1, BG-W1
SBB-1832732523-KFKF-S1	18.0 to 26.5	25	2.0	23	2:1	+10.0/800	BG-C1, BG-N1, BG-W1
SBB-1832733523-KFKF-S1	18.0 to 26.5	35	2.5	23	2:1	+10.0/900	BG-C1, BG-N1, BG-W1
SBB-1834032513-KFKF-S1	18.0 to 40.0	25	2.8	13	2:1	+10.0/250	BG-C1, BG-N1, BG-W1
SBB-1834033513-KFKF-S1	18.0 to 40.0	35	3.0	13	2:1	+10.0/350	BG-C1, BG-N1, BG-W1
SBB-1834033020-KFKF-S1	18.0 to 40.0	30	2.0	20	2:1	+10.0/850	BG-C1, BG-N1, BG-W1
SBB-1834034020-KFKF-S1	18.0 to 40.0	40	2.5	20	2:1	+10.0/950	BG-C1, BG-N1, BG-W1
SBB-2734032014-KFKF-S1	26.5 to 40.0	20	2.5	14	2:1	+10.0/250	BG-C1, BG-N1, BG-W1
SBB-2734033014-KFKF-S1	26.5 to 40.0	30	2.5	14	2:1	+10.0/350	BG-C1, BG-N1, BG-W1
SBB-2734032022-KFKF-S1	26.5 to 40.0	20	2.5	22	2:1	+10.0/500	BG-C1, BG-N1, BG-W1
SBB-2734033022-KFKF-S1	26.5 to 40.0	30	2.5	22	2:1	+10.0/650	BG-C1, BG-N1, BG-W1
SBB-3734532017-2F2F-S1	37.0 to 45.0	20	2.5	17	2:1	+10.0/650	BG-C1, BG-N1, BG-W1
SBB-3734533017-2F2F-S1	37.0 to 45.0	30	3.0	17	2:1	+10.0/800	BG-C1, BG-N1, BG-W1
SBB-3734532020-2F2F-S1	37.0 to 45.0	20	2.5	20	2:1	+10.0/850	BG-C1, BG-N1, BG-W1
SBB-3734533020-2F2F-S1	37.0 to 45.0	30	3.0	20	2:1	+10.0/950	BG-C1, BG-N1, BG-W1
SBB-5037032816-1515-S1	55.0 to 65.0	28	1.5	16	2:1	+10.0/200	BG-C2, BG-N2, BG-W2
SBB-5037032815-1515-S1	50.0 to 70.0	28	2.0	15	2:1	+10.0/200	BG-C2, BG-N2, BG-W2
SBB-7137632016-1212-S1	71.0 to 76.0	20	2.0	16	3:1	+10.0/250	BG-C2, BG-N2, BG-W2
SBB-7137633516-1212-S1	71.0 to 76.0	35	3.0	16	3:1	+10.0/450	BG-C2, BG-N2, BG-W2
SBB-8138631816-1212-S1	81.0 to 86.0	18	2.0	16	3:1	+10.0/250	BG-C2, BG-N2, BG-W2
SBB-8138633516-1212-S1	81.0 to 86.0	35	3.0	16	3:1	+10.0/450	BG-C2, BG-N2, BG-W2
SBB-9039632012-1010-S1	90.0 to 96.0	15	2.0	12	3:1	+10.0/250	BG-C2, BG-N2, BG-W2
SBB-9039633012-1010-S1	90.0 to 96.0	30	3.0	12	3:1	+10.0/450	BG-C2, BG-N2, BG-W2

CUSTOM DESIGNED MODELS:

Sage Millimeter's broad bandwidth, general purpose amplifiers' model numbers are configured per following format. Customers may refer to the format and specify their own model numbers accordingly when placing the order. There are various housing style for amplifiers. Contact factory for details.

SBB - F1N F2N GG PP - CI CO - XY

- F1N is the start frequency in MHz x 10N. For example: 26.0 GHz = 263
- F2N is the stop frequency in MHz x 10N. For example: 28.0 GHz = 283
- GG is the linear gain in dB. For example: 25 dB = 25
- PP is the output P-1 dB in dBm. For example: 30 dBm = 30
- CI is the input connector type. For example: K(F) = KF
- CO is the output connector type. For example: WR-28 = 28
- X is for antenna type. "S" is for standard and "C" is for custom designed.
- Y is for factory reserve.

Example: SBB-2632832530-KF28-C1 is a custom designed broad bandwidth, general purpose amplifier with frequency range of 26 to 28 GHz, linear gain 25 dB and P-1 dB 30 dBm. The input connector is K(F) and the output RF connector is WR-28 waveguides. "1" is a factory assigned sequential number.