

Amplifier

ZX60-2534M-S+

50Ω 0.5 to 2.5 GHz

Features

- From 2.8V to 5V operation
- High directivity, 24 dB typ.
- Wide bandwidth, 0.5 to 2.5 GHz
- Low noise figure, 3.1 dB typ.
- Output power, up to 18 dBm typ.
- Protected by US patent 6,790,049

Applications

- Buffer amplifier
- Cellular
- PCN
- Lab
- Instrumentation
- Test equipment



CASE STYLE: GA955

Connectors	Model
SMA	ZX60-2534M-S+

+RoHS Compliant
 The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications at T_{AMB} = 25°C

MODEL NO.	FREQ. (GHz) f _L - f _U	DC VOLTAGE @ Pin V+ (V)	GAIN over frequency in GHz Typ (dB)						MAXIMUM POWER (dBm) Output (1 dB Comp.) Typ. f _L f _U		DYNAMIC RANGE			VSWR (:1) Typ.		ACTIVE DIRECTIVITY (dB) Isolation-Gain Typ.	DC OPERATING CURRENT @ Pin V+ (mA)	
			0.5	1.0	1.5	2.0	2.5	Min.at 2 GHz	NF (dB) Typ.	IP3 (dBm) Typ.	1GHz	1GHz	2GHz	In	Out		Typ.	Typ.
			1GHz		1GHz		2GHz											
ZX60-2534M-S+	0.5-2.5	5.0	31.7	39.4	39.4	38.4	35.9	34.0	18.0	15.9	3.1	30.0	27.8	1.3	1.5	25	153	185
		2.8	28.9	35.2	34.9	34.6	32.8	31.0	13.8	14.0	3.1	25.4	24.6	1.3	1.8	23	141	185

Maximum Ratings

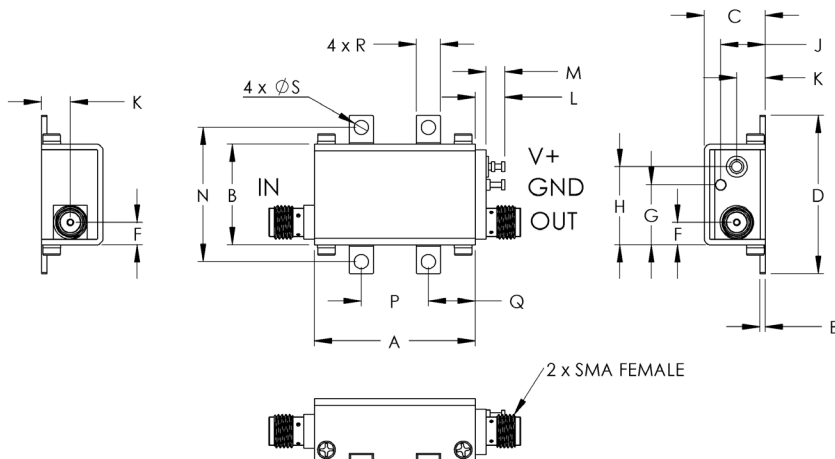
Operating Temperature	-40°C to 80°C case
Storage Temperature	-55°C to 100°C
DC Voltage	7V
Input Power (no damage)	-15dBm
Power	1W

Permanent damage may occur if any of these limits are exceeded.



NOTE: When soldering the DC connections, caution must be used to avoid overheating the DC terminals. See Application Note [AN-40-10](#).

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	wt.
1.20	.75	.46	1.18	.04	.17	.45	.59	.33	.21	.22	.14	1.00	.50	.35	.18	.106	grams
30.48	19.05	11.68	29.97	1.02	4.32	11.43	14.99	8.38	5.33	5.59	3.56	25.40	12.70	8.89	4.57	2.69	35.0

Notes

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Typical Performance Data at 25°C

ZX60-2534M-S+

V+ = 5.0V

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR IN (:1)	VSWR OUT (:1)	POWER OUT @1dB COMPRESSION (dBm)	IP3 (dBm)	NF (dB)
500	31.31	42.97	2.28	3.11	17.54	30.41	3.52
560	34.33	39.91	2.05	2.65	18.41	31.09	3.42
680	36.96	35.75	1.77	2.01	19.15	31.74	3.23
800	38.13	32.69	1.60	1.65	19.06	31.72	3.18
860	38.60	31.26	1.52	1.53	18.86	31.54	3.11
1000	39.31	27.91	1.37	1.36	18.24	30.85	3.07
1100	39.67	25.59	1.27	1.29	17.80	30.26	3.05
1160	39.73	24.30	1.21	1.26	17.57	29.90	3.02
1280	39.70	22.14	1.13	1.20	17.21	29.22	2.99
1400	39.49	20.75	1.09	1.16	16.98	28.66	2.94
1460	39.47	20.37	1.09	1.15	16.90	28.42	2.95
1500	39.24	20.23	1.09	1.14	16.86	28.29	2.94
1580	39.15	20.19	1.11	1.13	16.79	28.07	2.95
1700	38.85	20.54	1.16	1.13	16.69	27.86	3.00
1760	38.53	20.78	1.18	1.14	16.64	27.81	2.94
1880	38.32	21.07	1.21	1.19	16.50	27.76	2.97
2000	38.23	20.75	1.19	1.27	16.30	27.79	3.03
2060	38.30	20.28	1.16	1.33	16.19	27.81	3.04
2360	36.64	17.33	1.06	1.60	15.66	27.89	3.14
2500	35.29	21.18	1.45	1.64	15.58	27.86	3.18

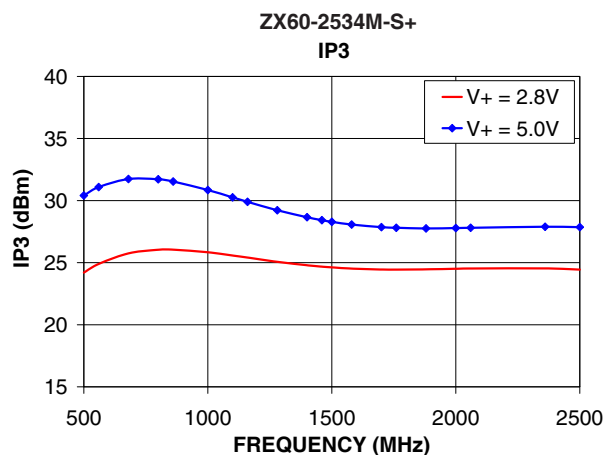
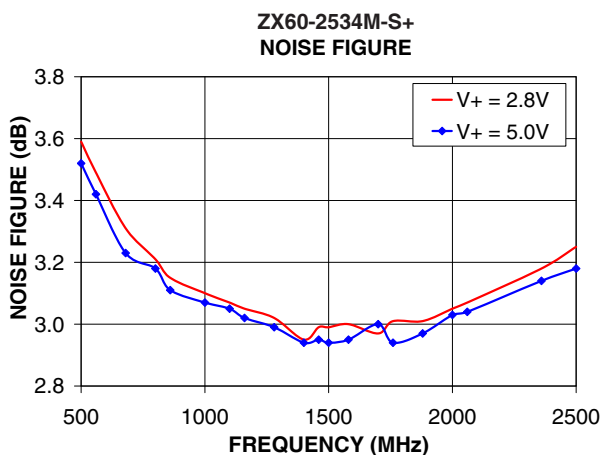
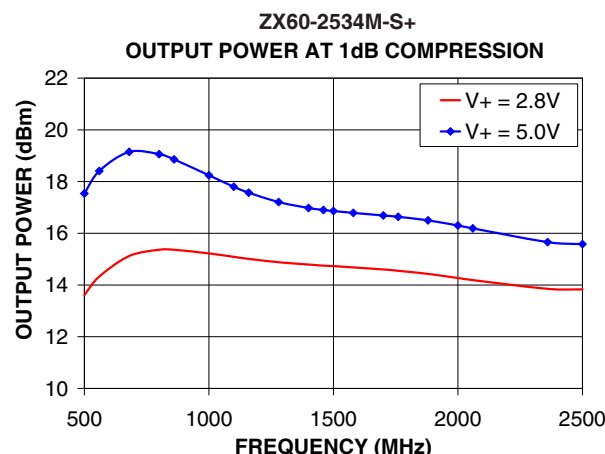
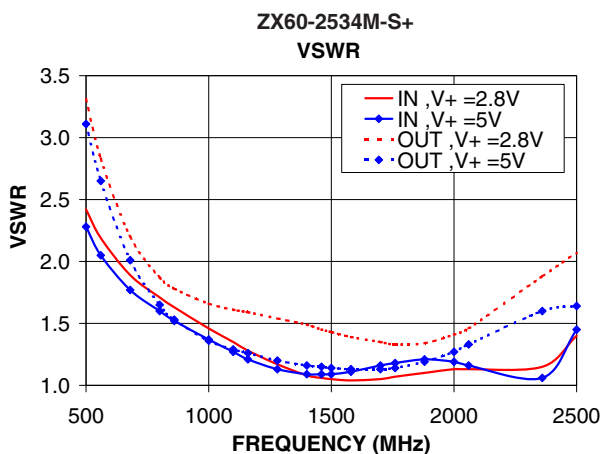
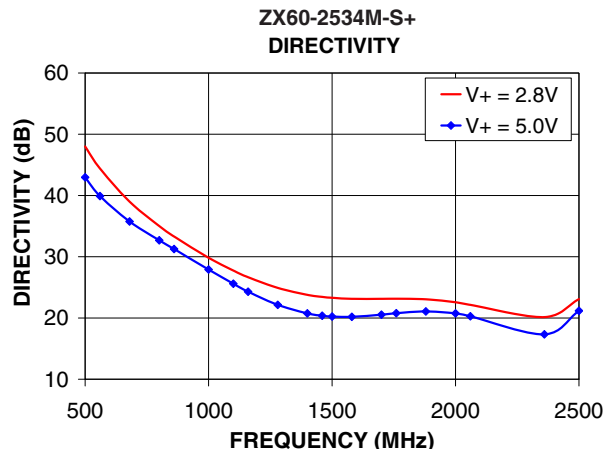
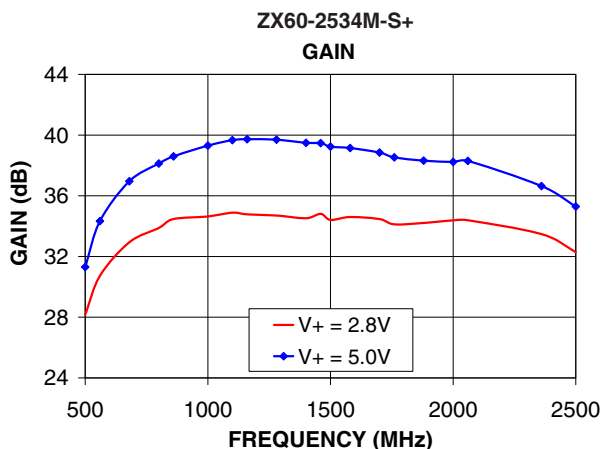
V+ = 2.8V

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR IN (:1)	VSWR OUT (:1)	POWER OUT @1dB COMPRESSION (dBm)	IP3 (dBm)	NF (dB)
500	28.16	48.01	2.42	3.31	13.61	24.20	3.59
560	30.73	44.40	2.19	2.83	14.33	24.90	3.49
680	32.94	39.00	1.89	2.20	15.12	25.75	3.31
800	33.88	35.01	1.71	1.87	15.36	26.04	3.21
860	34.47	33.31	1.63	1.78	15.36	26.05	3.15
1000	34.64	29.84	1.46	1.66	15.22	25.84	3.10
1100	34.89	27.74	1.35	1.61	15.09	25.58	3.07
1160	34.78	26.66	1.28	1.59	15.01	25.41	3.05
1280	34.70	24.91	1.17	1.54	14.88	25.07	3.02
1400	34.52	23.78	1.08	1.49	14.79	24.79	2.95
1460	34.81	23.44	1.06	1.45	14.75	24.68	2.99
1500	34.41	23.29	1.05	1.43	14.73	24.62	2.99
1580	34.60	23.13	1.04	1.39	14.68	24.52	3.00
1700	34.47	23.13	1.05	1.35	14.60	24.45	2.97
1760	34.12	23.15	1.07	1.33	14.55	24.44	3.01
1880	34.21	23.06	1.10	1.34	14.43	24.46	3.01
2000	34.38	22.57	1.13	1.41	14.27	24.51	3.05
2060	34.39	22.14	1.13	1.46	14.19	24.53	3.07
2360	33.48	20.15	1.15	1.88	13.85	24.54	3.18
2500	32.29	23.09	1.40	2.07	13.83	24.44	3.25

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