

# Connectorized Amplifier

## ZX60-2534M+

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	Price	Qty.
SMA	ZX60-2534M-S+	\$64.95 ea.	(1-9)

**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

*The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.*

### Electrical Specifications at T<sub>AMB</sub> = 25°C

MODEL NO.	FREQ. (GHz) f <sub>L</sub> - f <sub>U</sub>	DC VOLTAGE @ Pin V+ (V)	GAIN over frequency in GHz Typ (dB)						MAXIMUM POWER (dBm) Output (1 dB Comp.) Typ. f <sub>L</sub> f <sub>U</sub>		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.
ZX60-2534M+	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

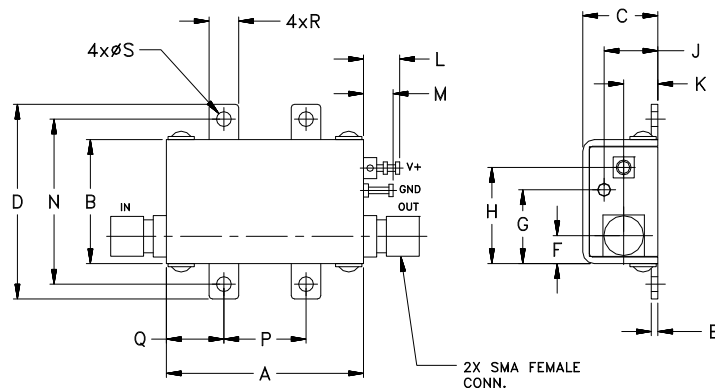
DC Voltage 7V

Input Power (no damage) -15dBm

Power 1W

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

### 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	.18	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	4.57	25.40	12.70	8.89	4.57	2.69	35.0



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

**Notes:** 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).

# Typical Performance Data at 25°C

# ZX60-2534M+

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



ISO 9001 ISO 14001 AS 9100 CERTIFIED

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