Coaxial

Amplifier

ZX60-2510M

50Ω High Isolation 500 to 2500 MHz

Features

- from 2.8V to 5V operation
- wide bandwidth, 500 to 2500 MHz
- high active directivity, 20 dB typ.
- output power, up to +17.1 dBm typ.
- protected by US patent 6,790,049

Applications

- buffer amplifier
- LO amplifiers for mixers
- cellular
- PCN

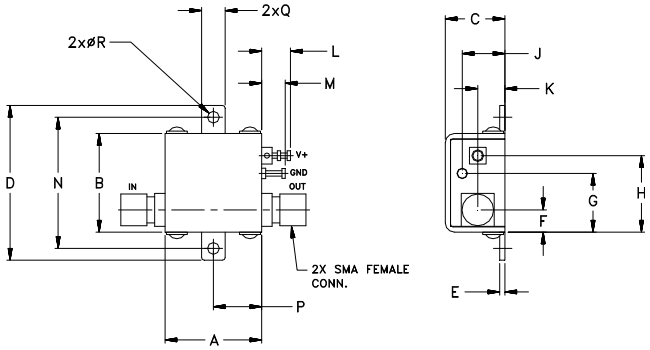
CASE STYLE: GC957

Connectors	Model
SMA	ZX60-2510M

Electrical Specifications at 25°C

Parameter	Condition (MHz)	2.8V			5.0V			Units
		Min.	Typ.	Max.	Min	Typ.	Max.	
Frequency		500		2500	500		2500	MHz
Gain	500	—	9.1	—	—	10.3	—	dB
	1000	—	11.2	—	—	12.7	—	
	1500	—	11.2	—	—	12.9	—	
	2000	—	10.7	—	10.4	12.5	—	
	2500	—	10.3	—	—	12.1	—	
Output Power at 1dB compression	500	—	13.7	—	—	17.1	—	dBm
	2500	—	13.0	—	—	15.1	—	
Noise Figure	1000	—	5.4	—	—	5.4	—	dB
Output third order intercept point	1000	—	24.9	—	—	28.8	—	dBm
	2000	—	23.4	—	—	26.5	—	
Input VSWR		—	1.5	—	—	1.5	—	:1
Output VSWR		—	1.6	—	—	1.6	—	:1
Active Directivity (Isolation-Gain)		—	20	—	—	20	—	dB
Supply Current		—	63	—	—	69	95	mA

Outline Drawing



NOTE: When soldering the DC connections, caution must be used to avoid overheating the DC terminal. See Application Note. AN-40-010.

Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	wt
.74	.75	.46	1.18	.04	.17	.45	.59	.33	.21	.22	.18	1.00	.37	.18	.106	grams
18.80	19.05	11.68	29.97	1.02	4.32	11.43	14.99	8.38	5.33	5.59	4.57	25.40	9.40	4.57	2.69	23.0

Maximum Ratings

Parameter	Ratings
Operating Temperature	-40°C to 85°C Case
Storage Temperature	-55°C to 100°C
DC Voltage	7V
Input RF Power (no damage)	+10 dBm
Power Dissipation	500mW

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

Notes

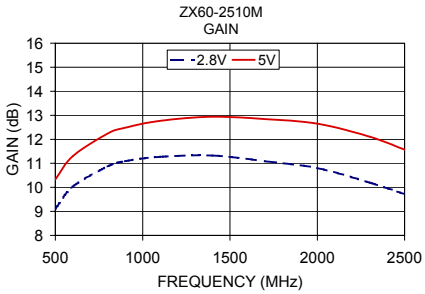
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document 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

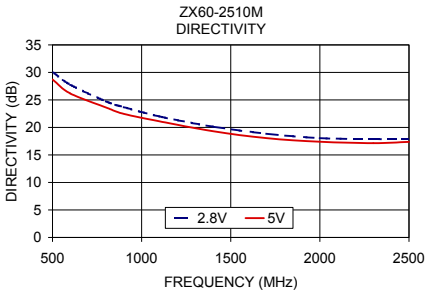
REV. F
M160892
ZX60-2510M
EDR-6123
RVN/TD/CP/AM
170406

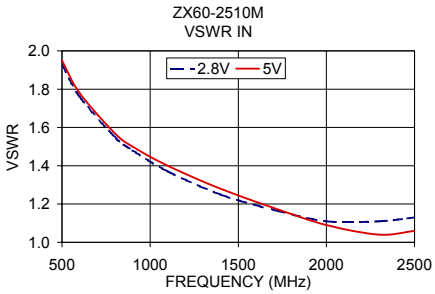
Typical Performance Data/Curves

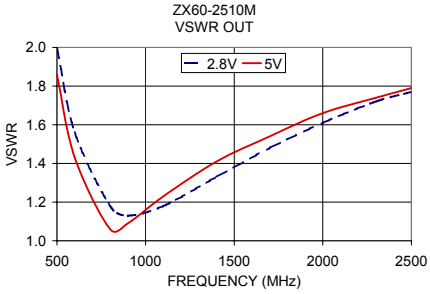
ZX60-2510M

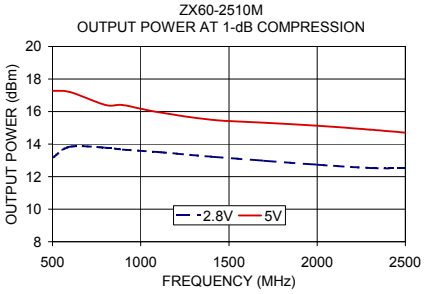
FREQUENCY (MHz)	GAIN (dB)		DIRECTIVITY (dB)		VSWR IN (:1)		VSWR OUT (:1)		NOISE FIGURE (dB)		POUT at 1 dB COMPR. (dBm)	
	2.8V	5V	2.8V	5V	2.8V	5V	2.8V	5V	2.8V	5V	2.8V	5V
500.00	9.10	10.33	30.11	28.71	1.93	1.95	2.00	1.86	5.70	5.59	13.15	17.28
600.00	10.03	11.30	27.78	26.18	1.76	1.78	1.56	1.43	5.62	5.52	13.84	17.20
800.00	10.87	12.24	24.75	23.62	1.55	1.57	1.18	1.06	5.57	5.49	13.78	16.41
900.00	11.09	12.48	23.70	22.45	1.48	1.50	1.13	1.09	5.54	5.46	13.66	16.40
1100.00	11.27	12.77	21.99	21.11	1.37	1.40	1.18	1.23	5.51	5.42	13.51	15.96
1400.00	11.32	12.94	20.14	19.32	1.25	1.28	1.33	1.41	5.44	5.35	13.23	15.50
1700.00	11.09	12.84	18.87	18.07	1.17	1.18	1.48	1.54	5.47	5.35	12.98	15.31
2000.00	10.80	12.65	18.05	17.39	1.11	1.09	1.61	1.66	5.51	5.40	12.73	15.13
2300.00	10.20	12.11	17.88	17.13	1.11	1.04	1.72	1.74	5.53	5.39	12.53	14.89
2500.00	9.72	11.57	17.84	17.37	1.13	1.06	1.77	1.79	5.56	5.43	12.50	14.71

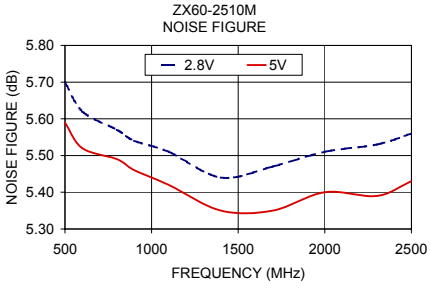












Notes

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

C. The parts covered by this specification document 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

Mini-Circuits®

www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

Page 2 of 2