

Coaxial

# Amplifier

# NON-CATALOG

## ZX60-5916M+

50Ω High Isolation 1.5 to 5.9 GHz

### Features

- from 2.8V to 5V operation
- wide bandwidth, 1.5 to 5.9 GHz
- high active directivity, 25 dB typ.
- output power, up to 14.5 dBm typ.
- protected by US patent 6,790,049

### Applications

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



CASE STYLE: GC957  
 Connectors Model  
**SMA ZX60-5916M-S+**

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

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

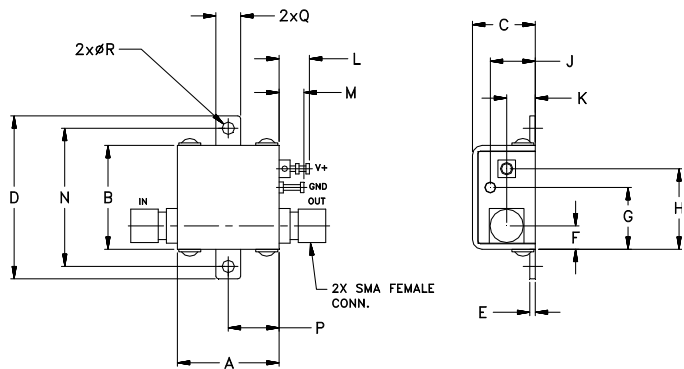
MODEL NO.	FREQ. (GHz)		DC VOLTS (V)	GAIN, dB Typical					MAXIMUM POWER (dBm)			DYNAMIC RANGE			VSWR (:1) Typ.		ACTIVE DIRECTIVITY (dB) (Isolation-Gain) Typ	DC OPERATING CURRENT @ Pin V+ (mA)		
	f <sub>L</sub>	f <sub>U</sub>		over frequency, GHz					Output (1 dB Comp.) Typ.		Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.		In	Out		Typ	Typ	Max.
				1.5	2.0	3.5	5.0	5.9	f <sub>L</sub>	f <sub>U</sub>			at 2 GHz	at 2 GHz						
ZX60-5916M+	1.5	5.9	5.0	17.0	17.7	17.2	18.0	13.8	15.5	14.5	15.7	10	6.4	28.3	28.9	2.2	1.2	20	73	96
			2.8	13.6	14.6	14.7	16.5	11.5	—	11.5	12.8	10	7.0	23.5	23.5	2.5	1.4	25	66	—

### Maximum Ratings

Operating Temperature	-40°C to 85°C case
Storage Temperature	-55°C to 100°C
DC Voltage	7V
Input Power(no damage)	10 dBm
Power	500mW

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

### 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

### Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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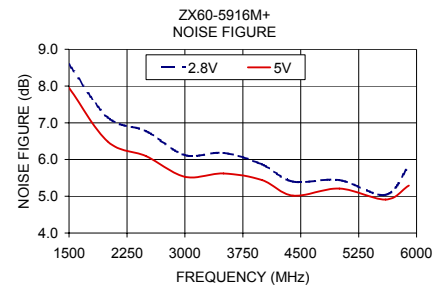
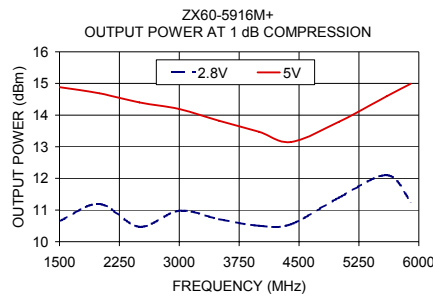
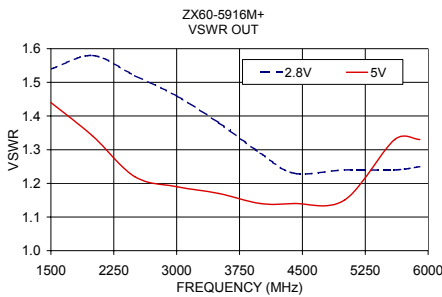
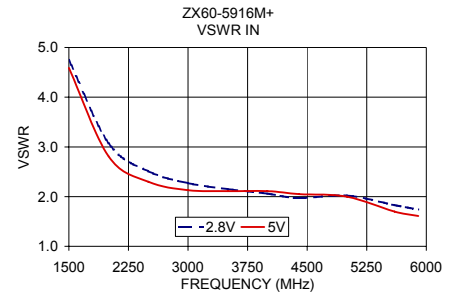
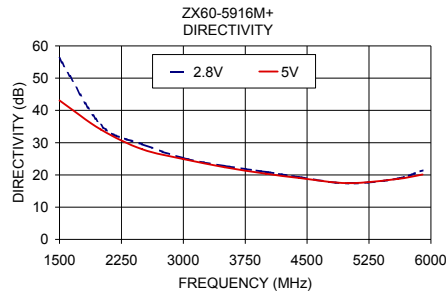
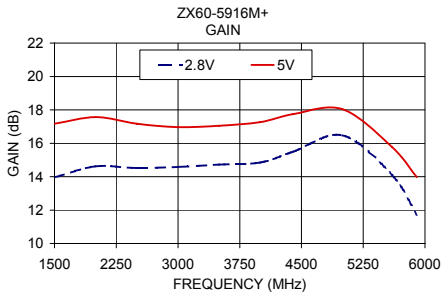
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 M160892  
 ZX60-5916M  
 EDR-6128  
 RVN/TD/CP/AM  
 170406  
 Page 1 of 2

# NON-CATALOG

## Typical Performance Data/Curves

## ZX60-5916M+

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
1500.00	13.96	17.17	56.17	43.10	4.75	4.59	1.54	1.44	8.59	7.95	10.65	14.88
2000.00	14.62	17.57	35.49	34.05	3.07	2.81	1.58	1.34	7.15	6.49	11.19	14.69
2500.00	14.52	17.17	29.52	27.98	2.51	2.30	1.52	1.22	6.77	6.09	10.47	14.40
3000.00	14.58	16.96	25.18	24.90	2.27	2.13	1.46	1.19	6.12	5.53	10.98	14.19
3500.00	14.72	17.05	22.78	22.37	2.15	2.11	1.38	1.17	6.18	5.62	10.71	13.82
4000.00	14.85	17.27	20.93	20.39	2.06	2.11	1.29	1.14	5.87	5.44	10.50	13.47
4400.00	15.50	17.75	19.31	19.04	1.97	2.05	1.23	1.14	5.40	5.02	10.55	13.15
5000.00	16.48	18.04	17.36	17.44	2.02	2.00	1.24	1.15	5.44	5.21	11.39	13.79
5600.00	14.10	15.78	18.86	18.78	1.83	1.70	1.24	1.33	5.04	4.91	12.10	14.60
5900.00	11.72	13.97	21.38	20.13	1.74	1.61	1.25	1.33	5.82	5.29	11.27	14.99



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