

# Amplifier

## ZX60-3018G-S+

50Ω 20 MHz to 3 GHz

### Features

- Wide bandwidth, 20 MHz to 3 GHz
- Low noise figure, 2.7 dB typ.
- Output power up to 12.8 dBm typ.
- Protected by US patent 6,790,049

### Applications

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



CASE STYLE: GC957

Connectors	Model
SMA	ZX60-3018G-S+

**+RoHS Compliant**  
The +Suffix identifies 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.		DYNAMIC RANGE		VSWR (:1) Typ.		ACTIVE DIRECTIVITY (dB) Isolation-Gain Typ.	DC OPERATING CURRENT @ Pin V+ (mA)	
			0.1	1.0	2.0	3.0	Min.at 2 GHz	f <sub>L</sub>	f <sub>U</sub>	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out		Typ.	Typ.
ZX60-3018G-S+	0.02 - 3	12.0	22.8	21.9	20.3	18.8	18.0	12.8	10.2	2.7	25.0	1.3	1.4	2-6	34	45

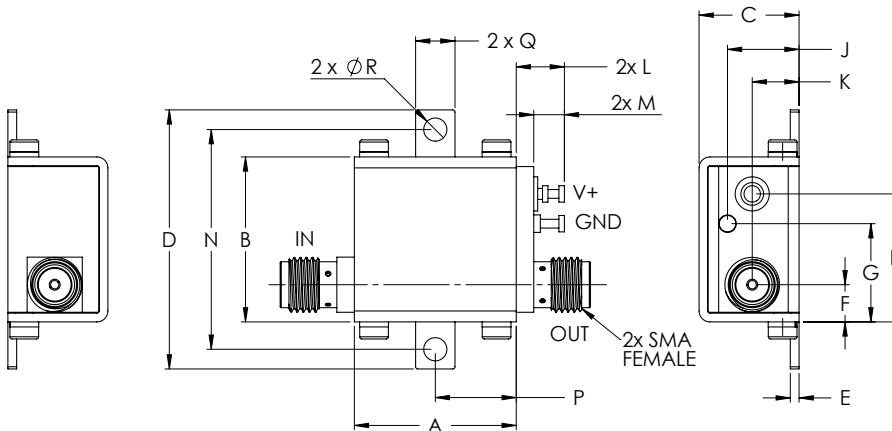
### Maximum Ratings

Operating Temperature	-45°C to 85°C case
Storage Temperature	-55°C to 100°C
DC Voltage	12.5V
Input Power(no Damage)	13dBm
Power	0.7W

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	WT. GRAM
.74	.75	.46	1.18	.04	.17	.45	.59	.33	.21	.22	.14	1.00	.37	.18	.106	23.0
18.80	19.05	11.68	29.97	1.02	4.32	11.43	14.99	8.38	5.33	5.59	3.56	25.40	9.40	4.57	2.69	

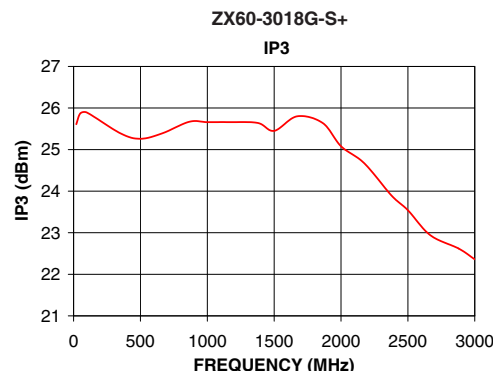
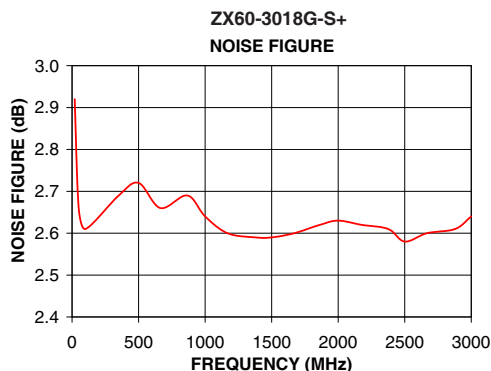
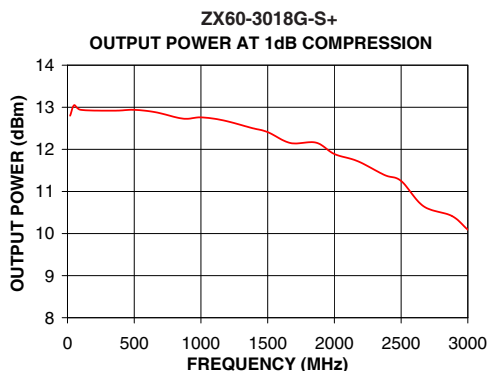
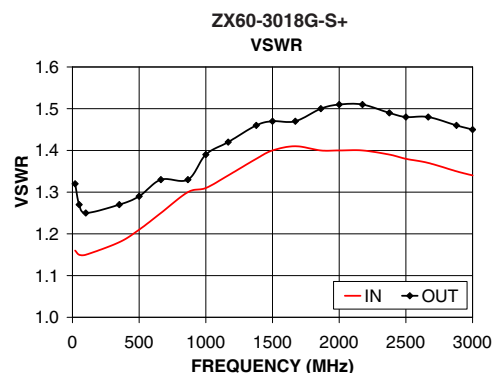
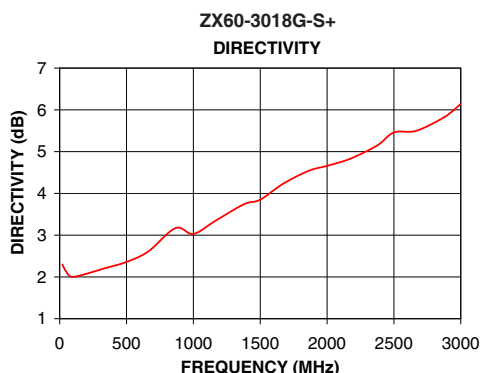
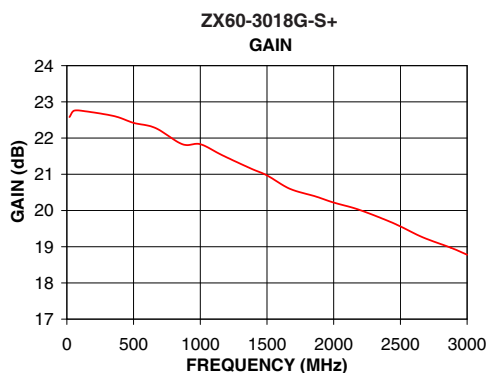
#### Notes

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# Typical Performance Data & Curves at 25°C ZX60-3018G-S+

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR IN (:1)	VSWR OUT (:1)	POWER OUT @1dB COMPRESSION (dBm)	IP3 (dBm)	NF (dB)
20	22.58	2.30	1.16	1.32	12.80	25.61	2.92
50	22.75	2.12	1.15	1.27	13.05	25.87	2.66
100	22.76	2.00	1.15	1.25	12.94	25.89	2.61
351	22.61	2.22	1.18	1.27	12.92	25.39	2.69
500	22.42	2.36	1.21	1.29	12.94	25.26	2.72
663	22.28	2.61	1.25	1.33	12.88	25.39	2.66
866	21.83	3.17	1.30	1.33	12.73	25.67	2.69
1000	21.83	3.03	1.31	1.39	12.76	25.66	2.64
1168	21.52	3.35	1.34	1.42	12.69	25.66	2.60
1378	21.16	3.74	1.38	1.46	12.51	25.64	2.59
1500	20.97	3.85	1.40	1.47	12.41	25.45	2.59
1671	20.60	4.23	1.41	1.47	12.15	25.80	2.60
1863	20.39	4.54	1.40	1.50	12.16	25.64	2.62
2000	20.22	4.66	1.40	1.51	11.89	25.08	2.63
2174	20.04	4.83	1.40	1.51	11.72	24.67	2.62
2376	19.76	5.15	1.39	1.49	11.39	23.90	2.61
2500	19.56	5.46	1.38	1.48	11.25	23.54	2.58
2668	19.26	5.50	1.37	1.48	10.65	22.94	2.60
2879	18.97	5.83	1.35	1.46	10.42	22.62	2.61
3000	18.78	6.14	1.34	1.45	10.09	22.36	2.64



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