

Coaxial Frequency Mixer

ZP-5+

Level 7 (LO Power +7 dBm) 20 to 1500 MHz



BNC version shown
CASE STYLE: GG60
Connectors Model
BNC ZP-5+
SMA ZP-5-S+

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

Coaxial Connections

LO	L
RF	R
IF	X

Features

- low conversion loss, 5.7 dB typ.
- excellent L-R isolation, 42 dB typ.
- wideband, 20 to 1500 MHz
- rugged shielded case

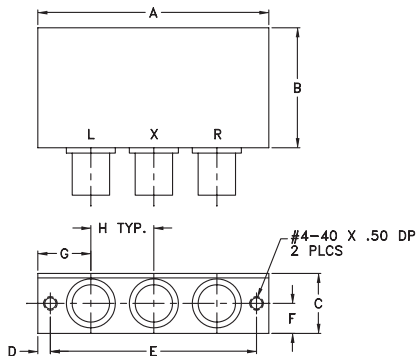
Applications

- VHF/UHF
- satellite distribution
- instrumentation

+RoHS Compliant

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

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	wt
2.31	1.20	.60	.125	2.062	.30	.53	.63	grams
58.67	30.48	15.24	3.18	52.37	7.62	13.46	16.00	75.0

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF f_L - f_U	IF	Mid-Band m			Total Range Max.	L		M		U		L		M		U	
		\bar{X}	σ	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.		
20-1500	DC-1000	5.7	0.10	9.0	9.0	54	40	42	30	39	25	40	25	32	18	23	8

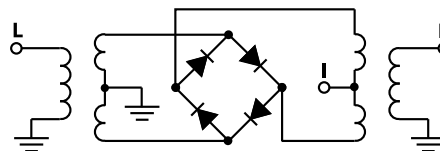
1 dB COMP.: +1 dBm typ.

L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]
m = mid band [$2f_L$ to $f_U/2$]

Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
20.00	50.00	5.76	69.06	50.01	1.56	2.37
40.00	70.00	5.54	63.75	45.70	1.44	2.31
50.00	80.00	5.44	61.73	43.88	1.56	2.17
100.00	70.00	5.38	56.05	38.99	1.62	2.16
158.75	128.75	5.40	52.30	36.23	1.89	2.18
200.00	170.00	5.41	49.90	34.38	2.12	2.20
297.50	267.50	5.58	46.54	31.36	2.25	2.23
436.25	406.25	5.81	46.39	28.70	2.65	2.27
500.00	470.00	5.94	46.35	27.70	3.02	2.33
575.00	545.00	6.28	45.43	26.65	3.26	2.35
713.75	683.75	6.65	43.76	25.47	3.36	2.38
750.00	720.00	6.73	43.43	25.18	3.43	2.42
852.50	822.50	6.83	42.21	24.77	3.60	2.54
991.25	961.25	7.20	40.31	22.85	3.65	2.71
1000.00	970.00	7.15	40.23	22.65	3.65	2.84
1130.00	1100.00	7.28	38.87	19.85	3.62	2.90
1268.75	1238.00	7.27	38.46	17.22	3.58	3.10
1407.50	1377.50	7.29	37.61	14.48	3.50	3.39
1453.75	1423.75	7.22	37.14	13.58	3.42	3.62
1500.00	1470.00	7.38	36.87	12.98	3.39	3.76

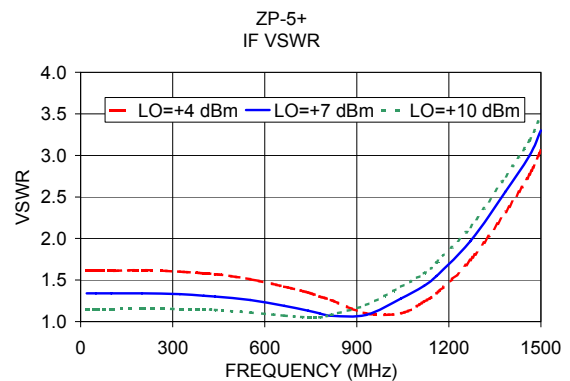
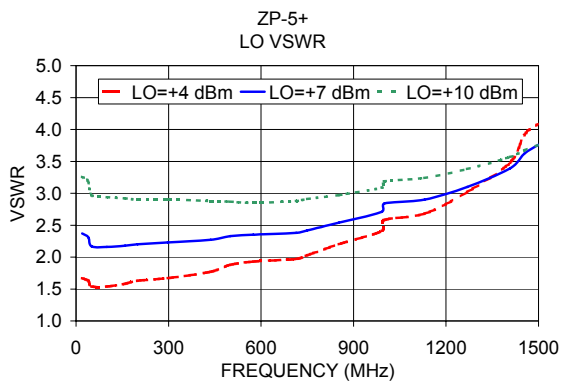
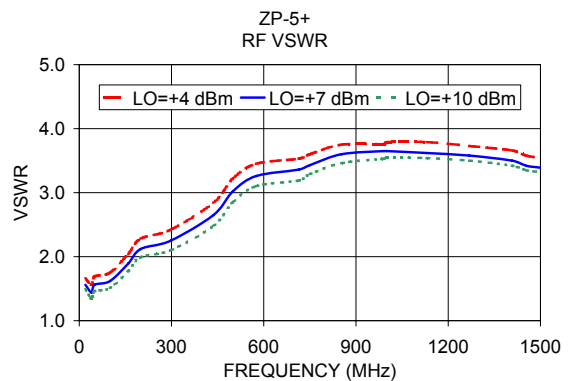
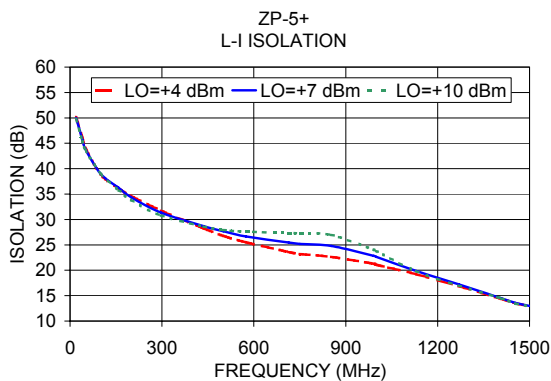
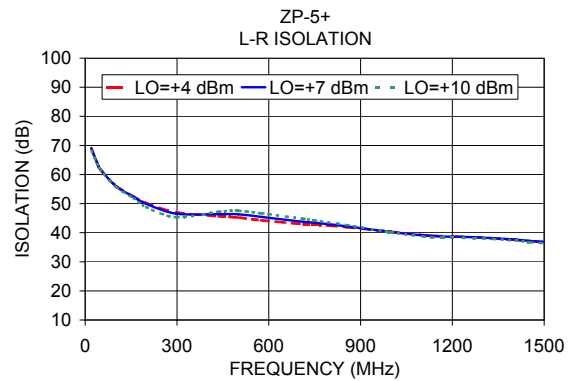
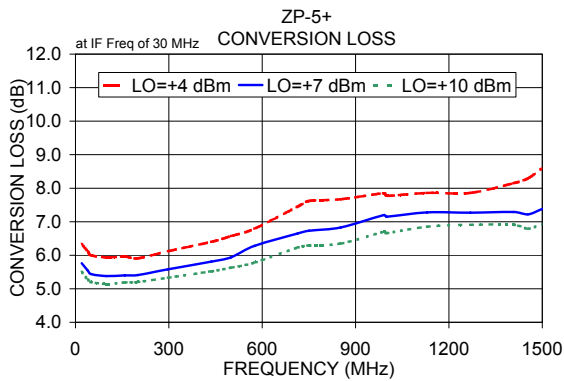
Electrical Schematic



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.
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