

# Coaxial Frequency Mixer

Level 13 (LO Power +13 dBm) 20 to 1500 MHz

## ZP-5MH+ ZP-5MH



BNC version shown  
CASE STYLE: GG60

### Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

### Coaxial Connections

LO	L
RF	R
IF	X

### Features

- low conversion loss, 7.0 dB typ.
- excellent L-R isolation, 41 dB typ.
- rugged shielded case

### Applications

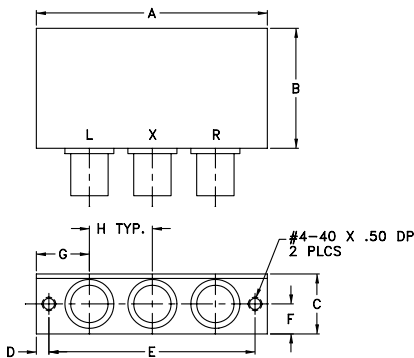
- VHF/UHF
- satellite distribution
- instrumentation

Connectors	Model
BNC	ZP-5MH-(+)
SMA	ZP-5MH-S(+)

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

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
58.7	30.5	15.2	3.2	52.4	7.6	13.5	16.0	75.0

### Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)					LO-IF ISOLATION (dB)										
		Mid-Band m		Total Range Max.			L		M		U						
LO/RF $f_L$ - $f_U$	$\bar{X}$ $\sigma$ Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.						
20-1500	DC-1000	7.0	0.25	8.5	9.0	50	40	41	30	35	25	38	25	28	18	20	8

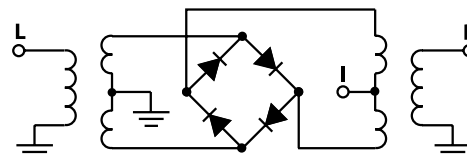
1 dB COMP.: +9 dBm typ.

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 [ $2 f_L$  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)	
						LO +13dBm
20.00	50.00	5.87	65.81	50.21	1.57	2.60
50.00	80.00	5.57	58.31	42.94	1.38	2.52
100.00	70.00	5.41	52.44	37.15	1.37	2.40
158.75	128.75	5.37	48.96	34.29	1.48	2.28
200.00	170.00	5.43	47.29	32.96	1.56	2.37
297.50	267.50	5.51	45.30	30.09	1.77	2.30
436.25	406.25	5.79	45.57	27.35	2.15	2.34
500.00	470.00	5.90	45.56	26.32	2.23	2.33
575.00	545.00	6.21	44.68	25.44	2.70	2.39
713.75	683.75	6.95	43.61	24.34	3.13	2.40
750.00	720.00	7.16	43.15	24.17	3.17	2.43
760.00	730.00	7.15	43.01	24.16	3.31	2.44
852.50	822.50	7.16	41.36	23.95	3.52	2.50
991.25	961.25	7.16	39.32	22.75	3.65	2.58
1000.00	970.00	7.32	39.30	22.64	3.71	2.59
1130.00	1100.00	7.38	36.80	20.71	3.70	2.62
1222.50	1192.50	7.32	38.30	18.60	3.63	2.70
1361.25	1331.25	7.13	37.67	15.58	3.42	2.64
1453.75	1423.75	7.10	37.62	13.78	3.33	2.62
1500.00	1470.00	7.00	37.26	12.95	3.23	2.57

### Electrical Schematic



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RF/IF MICROWAVE COMPONENTS

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061211  
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# Performance Charts

# ZP-5MH+ ZP-5MH

