

# Coaxial Frequency Mixer

## ZX05-C60MH-S+

Level 13 (LO Power +13 dBm) 1600 to 6000 MHz



CASE STYLE: FL905

Connectors	Model
SMA	ZX05-C60MH-S+

**+RoHS Compliant**

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

### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

### Coaxial Connections

LO	1
RF	2
IF	3

### Features

- rugged construction
- small size
- low conversion loss
- high L-R isolation
- protected by US Patents 6,790,049 & 7,027,795

### Applications

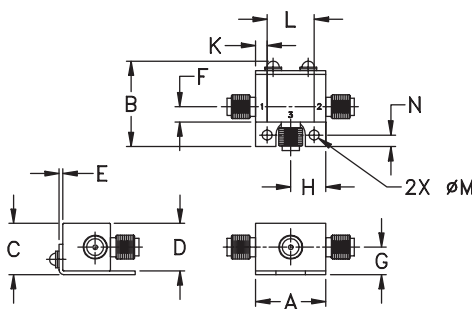
- cellular
- PCS
- instrumentation
- satellite communication

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

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)			
		Typ.	Min.	Typ.	Min.				
1600-6000	DC-2000								
1600-4400	DC-2000	6.9	0.1	8.5	32	25	17	—	15
4400-6000	DC-2000	6.0	0.1	8.5	22	18	15	—	15

1 dB COMP: +9 dBm typ.  
Conversion loss specification at 30 MHz IF

### Outline Drawing



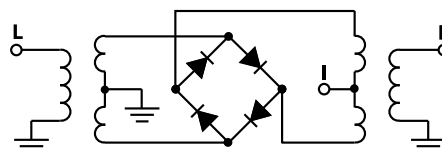
### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.74	.90	.54	.50	.04	.16	.29
18.80	22.86	13.72	12.70	1.02	4.06	7.37
H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0

### Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation (dB)		VSWR RF Port (:1)	VSWR LO Port (:1)	
		L-R (dB)	L-I (dB)			
RF	LO	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	
1600.10	1630.11	6.32	32.49	18.14	2.43	4.46
1833.43	1863.44	5.76	41.99	21.78	2.78	2.60
2066.77	2096.78	5.68	35.16	21.70	2.87	2.19
2300.10	2330.11	5.41	31.98	19.36	2.77	1.89
2533.43	2563.44	5.48	32.29	17.36	2.05	1.74
2766.77	2796.78	5.64	34.55	17.21	2.45	2.02
3000.10	3030.11	6.43	33.53	16.81	3.56	2.48
3233.43	3263.44	6.59	35.61	16.53	3.08	3.06
3466.77	3496.78	6.89	38.01	15.49	2.92	2.92
3700.10	3730.11	6.72	44.83	14.89	2.97	3.94
4050.10	4080.11	7.20	39.13	17.66	3.16	4.49
4283.43	4313.44	6.55	37.60	18.76	2.55	7.24
4505.10	4535.11	6.18	34.44	19.30	2.72	7.03
4718.51	4748.52	6.92	34.29	20.17	2.79	3.81
4931.93	4961.94	6.00	28.02	23.23	2.19	1.92
5145.34	5175.35	5.47	23.61	26.95	2.42	1.62
5358.76	5388.77	5.62	20.69	25.90	2.71	1.60
5572.17	5602.18	5.55	19.92	23.53	2.28	2.03
5785.59	5815.60	5.86	20.43	15.76	2.02	4.09
5999.00	5968.99	6.52	20.98	12.45	3.04	8.15

### Electrical Schematic



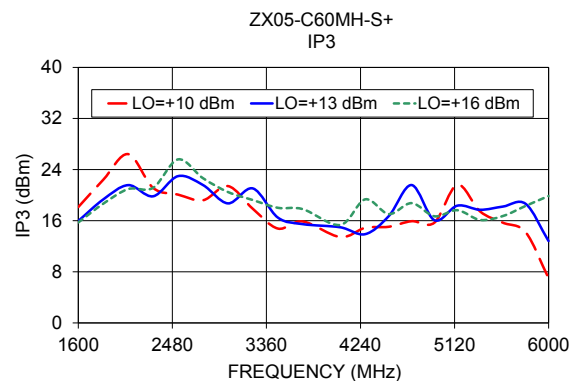
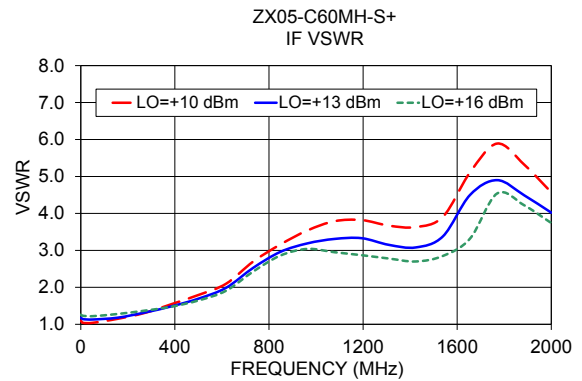
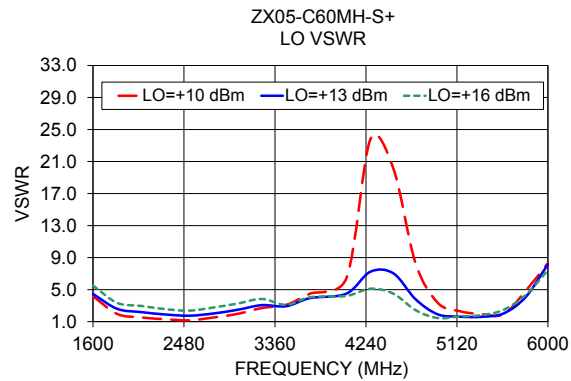
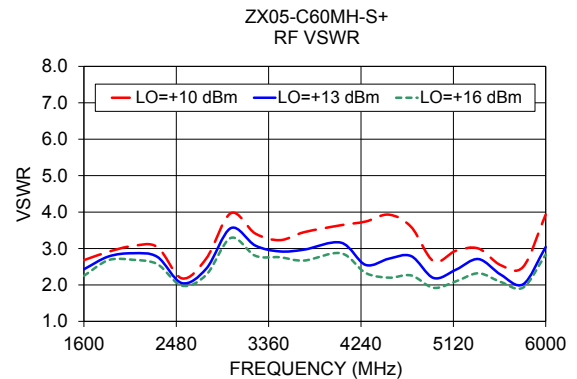
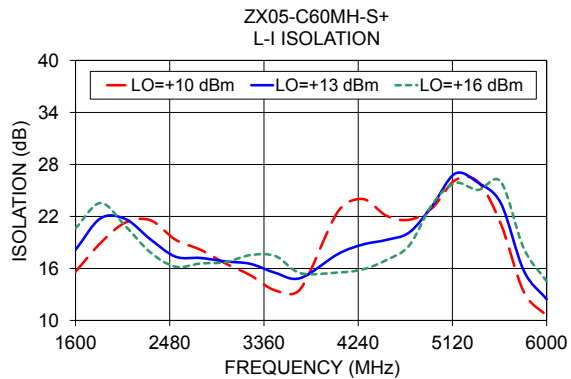
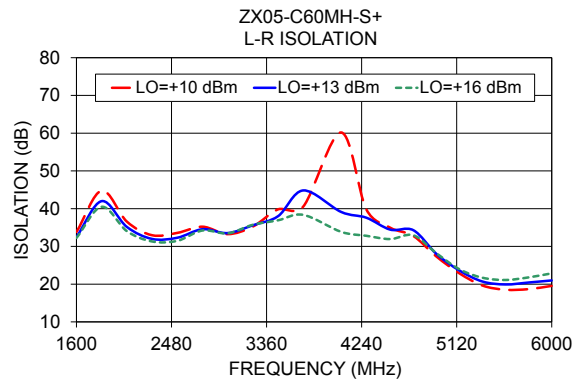
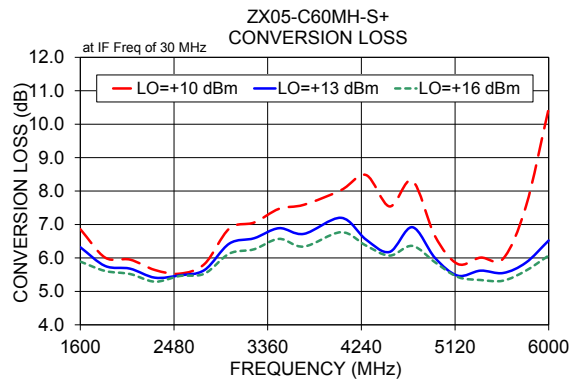
### Notes

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