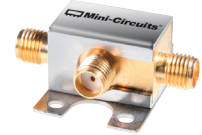


# Coaxial Frequency Mixer

## ZX05-25MH+

Level 13 (LO Power +13 dBm) 5 to 2500 MHz



CASE STYLE: FL905

Connectors	Model
SMA	ZX05-25MH-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 6,133,525 and 6,790,049

### Applications

- cellular
- PCS
- instrumentation
- satellite communication

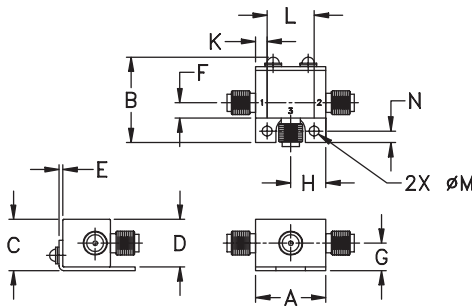
### Electrical Specifications (T<sub>AMB</sub>=25°C)

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)						IP3 at center band (dBm)				
		Mid-Band m		Total Range Max.		L		M		U		L			M		U	
LO/RF f <sub>L</sub> -f <sub>U</sub>	IF X σ Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	
5-2500	5-1500	6.9	0.1	8.8	9.8	47	28	34	23	34	23	34	23	32	18	23	17	18

1 dB COMP.: +9 dBm typ.

L = low range [f<sub>L</sub> to 10 f<sub>L</sub>] M = mid range [10 f<sub>L</sub> to f<sub>U</sub>/2] U = upper range [f<sub>U</sub>/2 to f<sub>U</sub>]  
m = mid band [2f<sub>L</sub> to f<sub>U</sub>/2]

### Outline Drawing



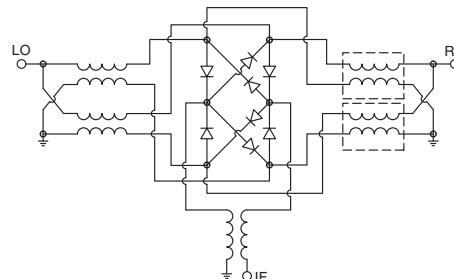
### Outline Dimensions (inch/mm)

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 L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
5.00	35.10	7.21	46.24	35.35	1.25	2.51
50.00	80.10	7.10	55.51	37.21	1.20	2.28
150.00	119.90	7.09	44.96	36.36	1.17	2.31
287.50	257.40	7.14	38.59	35.49	1.11	2.38
425.00	394.90	7.30	35.30	34.21	1.12	2.36
562.50	532.40	7.23	33.60	33.25	1.25	2.16
700.00	669.90	7.28	32.46	31.31	1.44	2.10
837.50	807.40	7.43	32.20	29.43	1.70	1.85
975.00	944.90	7.33	32.77	28.79	1.95	1.73
1112.50	1151.15	7.47	33.60	27.62	2.11	1.56
1250.00	1219.90	7.89	34.85	26.45	2.23	1.50
1375.00	1344.90	8.00	36.71	25.96	2.33	1.40
1525.00	1494.90	8.11	39.41	25.83	2.35	1.34
1675.00	1644.90	8.35	41.45	26.05	2.12	1.28
1825.00	1794.90	8.24	42.87	26.62	2.04	1.24
1975.00	1944.90	8.52	44.88	27.01	2.06	1.23
2125.00	2094.90	8.52	44.76	27.16	2.00	1.19
2275.00	2244.90	8.53	43.15	27.17	1.99	1.18
2425.00	2394.90	8.63	41.98	27.38	2.03	1.18
2500.00	2469.90	8.60	41.19	27.45	1.98	1.17

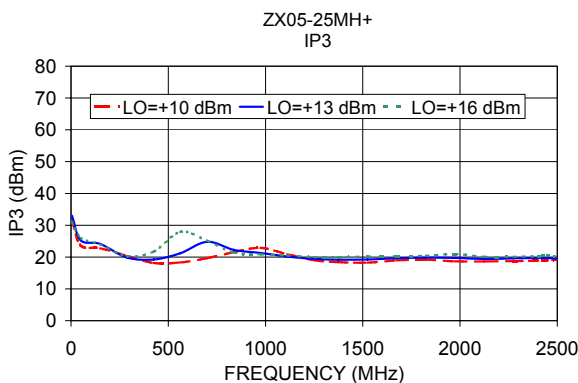
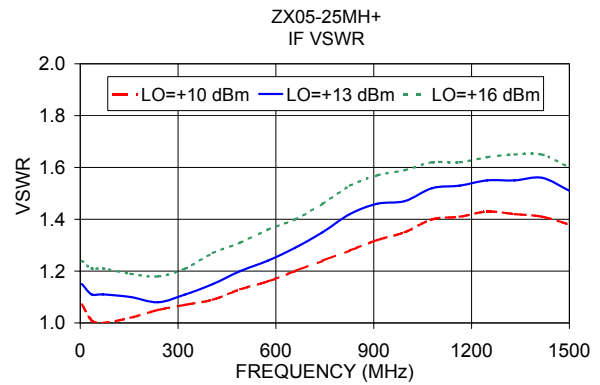
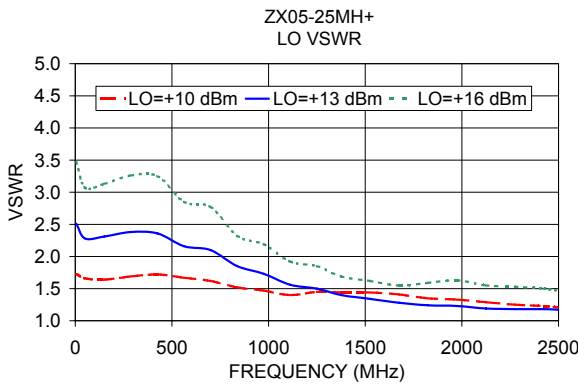
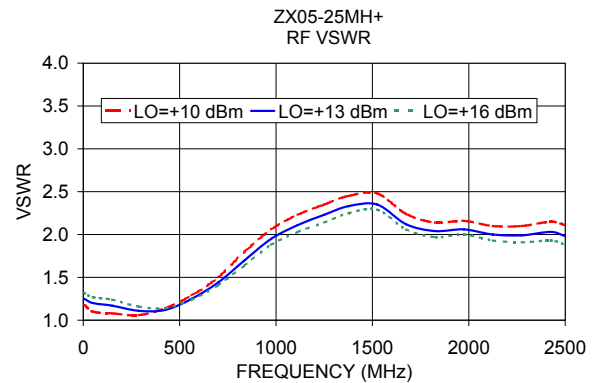
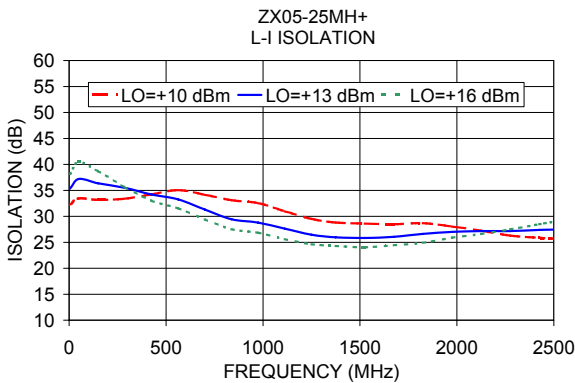
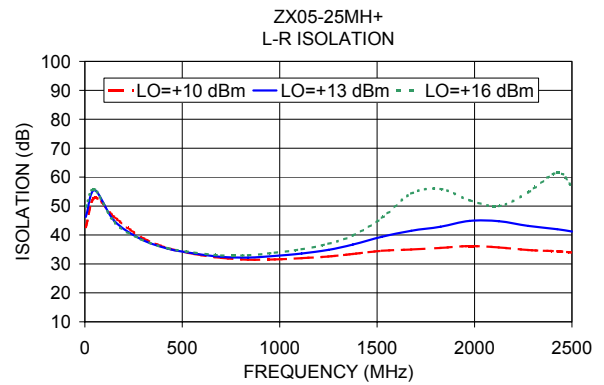
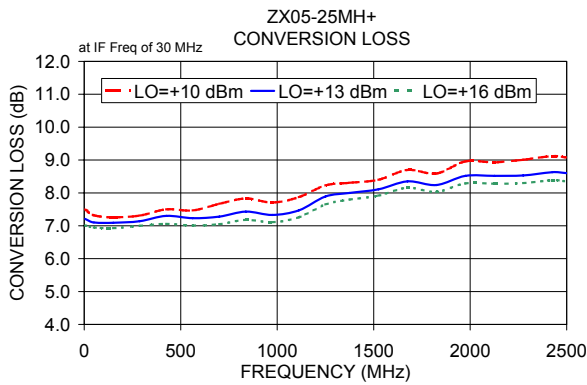
### Electrical Schematic



### 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.
- 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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