

Coaxial Frequency Mixer

Level 7 (LO Power +7 dBm) 10 to 1000 MHz

ZEM-2B+ ZEM-2B



Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

Coaxial Connections

LO	1
RF	2
IF	3

Features

- low conversion loss, 5.74 dB typ.
- broadband, 10 to 1000 MHz
- rugged shielded case

Applications

- VHF/UHF
- cellular
- instrumentation

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

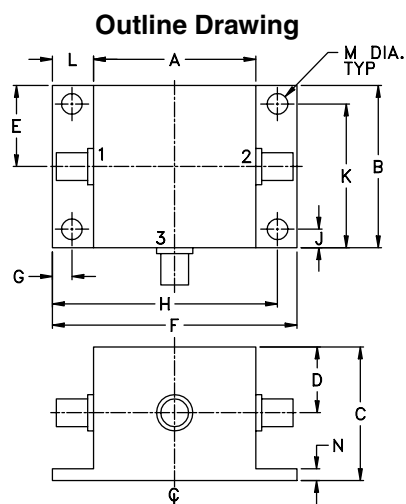
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
		L	M	U	L	M	U
10-1000	5.74	55	30	25	55	45	20

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 $f_U/2$]



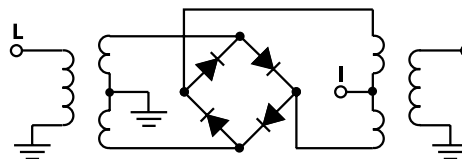
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.83	.83	.75	.37	.42	1.25	.100
21.08	21.08	19.05	9.40	10.67	31.75	2.54
H	J	K	L	M	N	wt
1.150	.095	.735	.21	.106	.06	grams
29.21	2.41	18.67	5.33	2.69	1.52	34

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
1.00	31.00	7.23	>67.00	1.30	2.70
2.00	32.00	6.50	>67.00	1.15	2.63
5.00	35.00	5.80	>67.00	1.07	2.77
10.00	40.00	5.62	>67.00	1.06	2.55
20.00	50.00	5.68	>67.00	1.07	2.41
50.00	80.00	5.58	61.94	1.09	2.37
100.00	70.00	5.53	54.33	1.11	2.29
167.34	137.34	5.57	48.65	1.16	2.20
233.87	203.87	5.72	45.10	1.18	2.16
300.40	270.40	5.45	42.56	1.20	2.13
366.94	336.94	5.73	40.45	1.22	2.06
466.74	436.74	5.82	38.33	1.23	2.13
500.00	470.00	5.72	38.80	1.26	2.09
599.81	569.81	6.02	37.43	1.29	2.09
666.34	636.34	6.11	37.94	1.34	2.04
799.41	769.41	6.27	36.06	1.40	2.13
832.68	802.68	6.46	35.22	1.47	2.19
899.21	869.21	7.00	33.77	1.55	2.24
932.48	902.48	7.37	33.17	1.66	2.28
1000.00	969.00	7.63	32.49	1.72	2.30

Electrical Schematic



Performance Charts

ZEM-2B+ ZEM-2B

