

# Coaxial Frequency Mixer

## ZEM-4300+

Level 7 (LO Power +7 dBm) 300 to 4300 MHz



### 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	2
RF	1
IF	3

### Features

- low conversion loss, 6.65 dB typ.
- broadband, 300 to 4300 MHz
- IF response to DC

### Applications

- UHF/VHF
- MMDS
- ISM/GPS
- instrumentation

CASE STYLE: V37

Connectors	Model	Price	Qty.
SMA	ZEM-4300+	\$79.95	(1-9)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

### Electrical Specifications

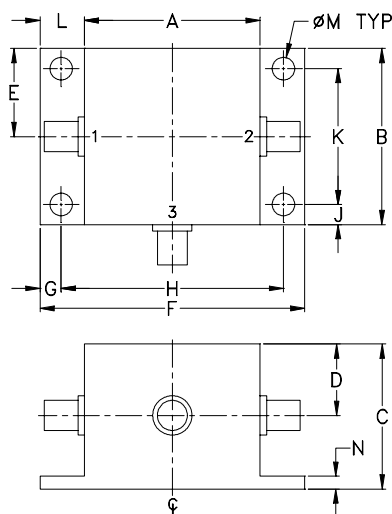
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)				LO-IF ISOLATION (dB)						
		Mid-Band		Total Range Max.		L		U				
LO/RF $f_L$ - $f_U$	IF $\bar{X}$ $\sigma$	$\bar{X}$	$\sigma$	Max.	L Typ.	U Typ.	L Min.	U Min.				
300-4300	DC-1000	6.65	0.06	9.5	40	20	30	17	15	8	15	8

1 dB COMP.: +1 dBm typ.

L = low range [ $f_L$  to  $10 f_L$ ]

U = upper range [ $10 f_U$  to  $f_U$ ]

### Outline Drawing



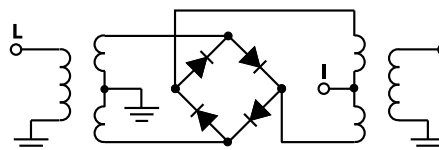
### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.83	.83	.75	.37	.42	1.25	.10
21.08	21.08	19.05	9.40	10.67	31.75	2.54
H	J	K	L	M	N	wt
1.050	.10	.640	.21	.106	.06	grams
26.67	2.54	16.26	5.33	2.69	1.52	22.0

### Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)	
						LO +7dBm
300.00	400.00	7.36	51.34	31.66	5.75	4.40
414.29	514.29	6.29	64.83	33.69	3.35	2.89
528.57	428.57	5.08	49.72	36.96	2.55	2.65
757.14	657.14	4.96	41.17	38.13	1.71	2.19
1000.00	900.00	5.45	37.81	30.37	2.55	2.08
1214.29	1114.29	6.11	36.73	26.04	3.13	1.99
1442.86	1342.86	6.61	35.66	22.90	3.50	1.85
1671.43	1571.43	6.86	34.88	19.27	4.13	1.68
1900.00	1800.00	7.03	33.74	17.66	4.48	1.61
2000.00	1900.00	7.13	33.54	17.52	5.06	1.57
2128.57	2028.67	7.43	33.70	17.76	5.38	1.47
2471.43	2371.43	8.04	33.24	18.85	5.56	1.41
2700.00	2000.00	8.34	33.45	19.52	5.51	1.37
2814.29	2714.29	8.52	34.07	19.86	5.27	1.36
3000.00	2900.00	8.85	33.99	19.95	5.77	1.58
3157.14	3057.14	9.03	33.55	19.48	6.97	1.60
3500.00	3400.00	9.22	32.04	18.72	8.72	2.03
3728.57	3628.57	9.04	30.42	18.47	8.23	2.39
4000.00	3900.00	8.91	29.46	20.82	7.47	2.43
4300.00	4200.00	8.41	33.24	24.62	6.26	2.13

### Electrical Schematic



**Mini-Circuits**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

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