Coaxial

Frequency Mixer

Level 7 (LO Power +7 dBm) 2000 to 4200 MHz

ZFM-4212



SMA version shown
CASE STYLE: K18

Connectors	Model	Price	Qty.
SMA	ZFM-4212	$54.95 ea.	(1-9)
BRACKET (OPTION "B")		$2.50	(1+)

+ 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.

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

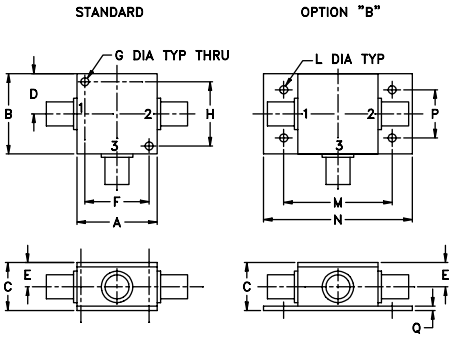
Features

- low conversion loss, 5.44 dB typ.
- wideband, 100 to 2000 MHz
- rugged shielded case

Applications

- VHF/UHF
- MMDS
- ISM
- instrumentation

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.00	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40

J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.75	.07	grams
--	--	3.18	42.88	55.37	19.05	1.78	70.0

Electrical Specifications

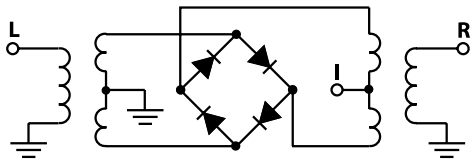
FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
		Mid-Band							
LO/RF	IF				Total Range				
f_L-f_U		$\overline{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.
2000-4200	DC-1300	5.44	0.088	—	8.5	25	17	18	10

1 dB COMP.: +1 dBm typ.

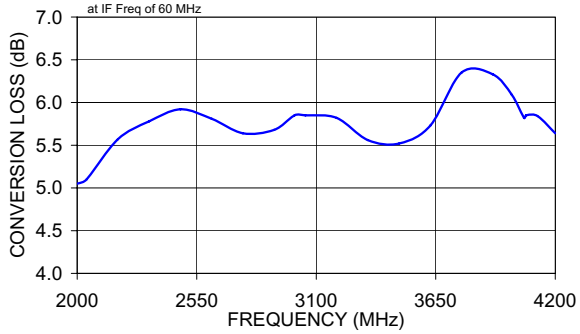
Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
2000.00	1940.00	5.05	25.3	13.6	1.99	6.73
2043.75	1983.75	5.10	25.3	13.5	1.99	6.26
2187.50	2127.50	5.57	23.6	13.9	1.99	5.85
2331.25	2271.25	5.78	24.4	14.0	1.91	6.05
2475.00	2415.00	5.92	26.5	14.6	2.01	6.49
2618.75	2558.75	5.81	27.7	15.9	2.35	6.49
2762.50	2702.50	5.64	28.3	16.2	2.43	6.49
2906.24	2846.24	5.68	28.1	17.2	2.37	6.26
3000.00	2940.00	5.85	28.7	18.2	2.40	6.73
3050.00	2990.00	5.85	28.1	18.5	2.43	7.60
3193.75	3133.75	5.82	27.2	18.7	2.27	8.72
3337.50	3277.50	5.56	26.7	19.2	2.10	8.31
3481.25	3421.25	5.52	27.4	17.9	2.25	8.72
3625.00	3565.00	5.73	27.4	16.5	2.12	5.49
3768.75	3708.75	6.35	27.1	16.0	2.30	4.32
3912.50	3852.50	6.33	28.6	15.6	2.30	4.53
4000.00	3940.00	6.09	29.9	15.5	2.18	4.42
4056.25	3996.25	5.82	30.5	15.4	1.96	4.32
4066.00	4006.00	5.85	30.6	15.3	1.91	4.32
4119.00	4059.00	5.84	30.6	15.2	1.73	4.12

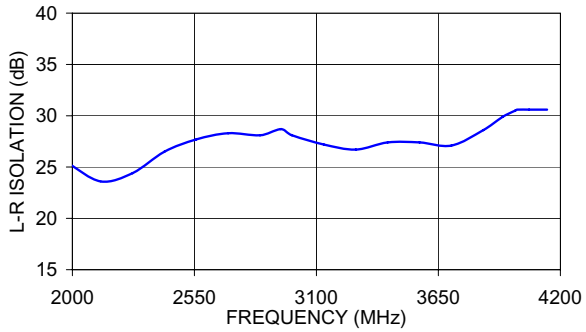
Electrical Schematic



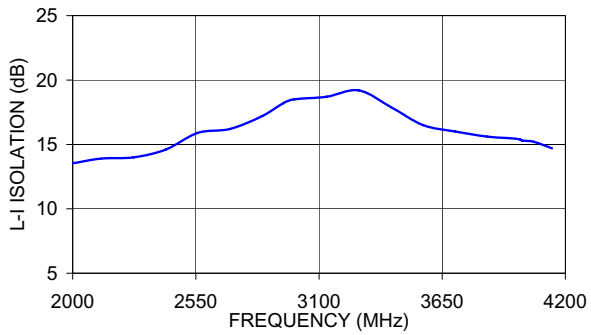
ZFM-4212
CONVERSION LOSS



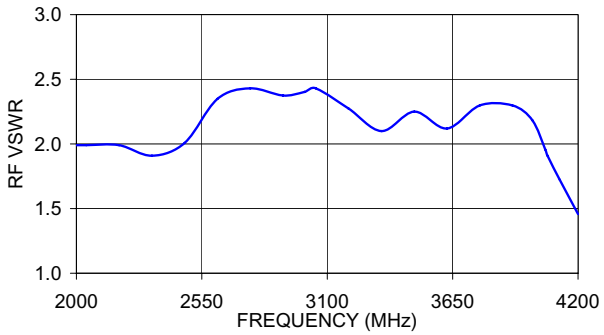
ZFM-4212
L-R ISOLATION



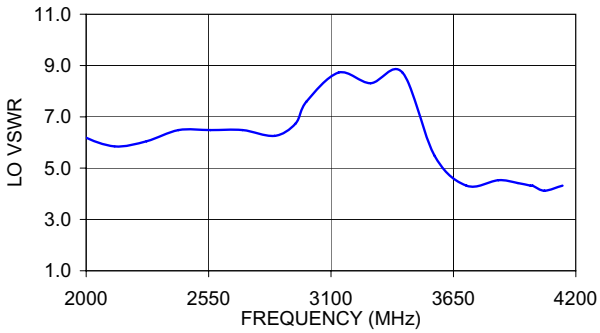
ZFM-4212
L-I ISOLATION



ZFM-4212
RF VSWR



ZFM-4212
LO VSWR



ZFM-4212
IF VSWR

