

Coaxial Frequency Mixer

Level 17 (LO Power +17 dBm) 0.05 to 300 MHz

Maximum Ratings

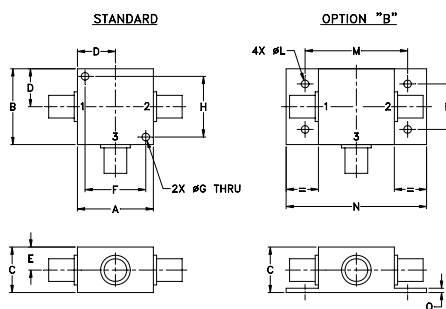
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

LO	1
RF	2
IF	3

Outline Drawing



Outline Dimensions (inch)

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

Features

- low conversion loss, 5.18 dB typ.
- high L-R isolation, 40 dB typ, L-I, 35 dB typ.
- rugged shielded case

Applications

- VHF
- FM radio
- defense & federal communications
- instrumentation



SMA version shown
CASE STYLE: K18

Connectors	Model	Price	Qty.
BNC	ZFM-3H+	\$64.95 ea.	(1-9)
SMA	ZFM-3H-S(+)	\$69.95 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.

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band		Total		L		M		U		L		M		U	
$f_L - f_U$		$\bar{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.05-300	DC-300	5.18	0.11	7.0	8.5	55	45	40	30	30	25	50	40	35	25	25	20

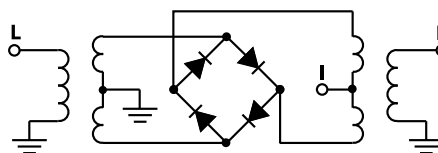
1 dB COMP.: +14 dBm typ.

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 $f_U/2$]

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 +17dBm	LO +7dBm	LO +17dBm	LO +17dBm	LO +17dBm
0.05	30.05	5.81	65.01	59.81	1.63	1.53
1.00	31.00	4.70	61.51	56.17	1.64	1.52
2.00	32.00	4.63	62.05	56.05	1.64	1.39
10.00	40.00	4.79	64.41	56.12	1.61	1.53
20.00	50.00	5.00	57.00	52.66	1.61	1.46
29.94	59.94	4.75	51.03	48.60	1.60	1.56
49.23	79.23	4.69	47.42	46.33	1.56	1.51
68.52	98.52	4.67	42.12	42.25	1.53	1.51
87.81	57.81	4.57	38.18	38.54	1.51	1.54
100.00	70.00	4.50	36.56	37.81	1.46	1.59
136.03	106.03	4.45	35.70	36.26	1.40	1.60
155.32	125.32	4.61	33.06	33.98	1.31	1.59
174.61	144.61	4.84	32.15	32.92	1.28	1.59
193.90	163.90	4.96	31.48	32.48	1.22	1.65
213.19	183.19	4.98	29.23	30.80	1.17	1.75
232.48	202.48	5.17	27.78	29.94	1.11	1.87
242.13	212.13	5.27	28.94	32.37	1.05	1.81
261.42	231.42	5.60	31.41	33.19	1.03	1.76
280.71	250.71	6.03	34.81	33.60	1.02	1.78
300.00	270.00	6.64	36.67	31.62	1.02	1.72

Electrical Schematic



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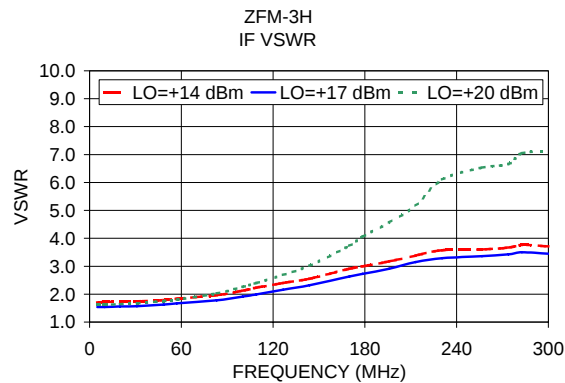
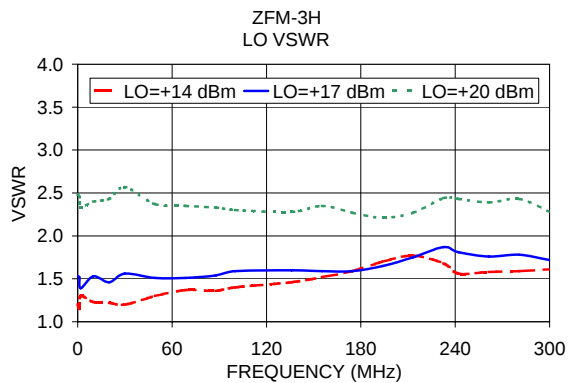
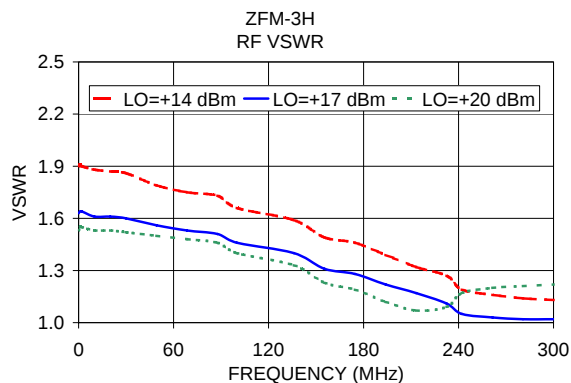
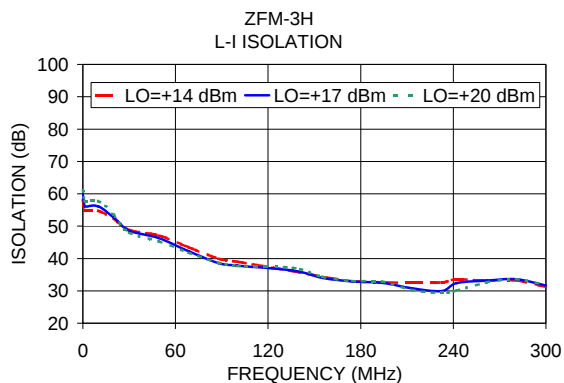
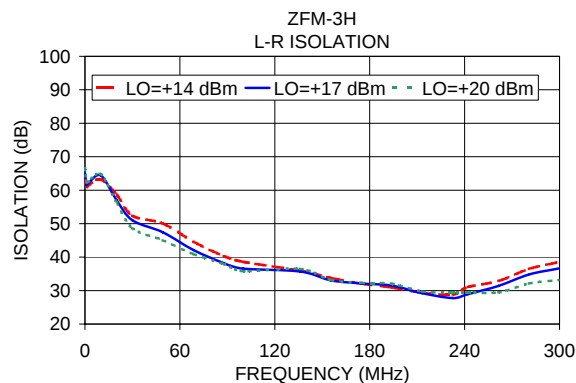
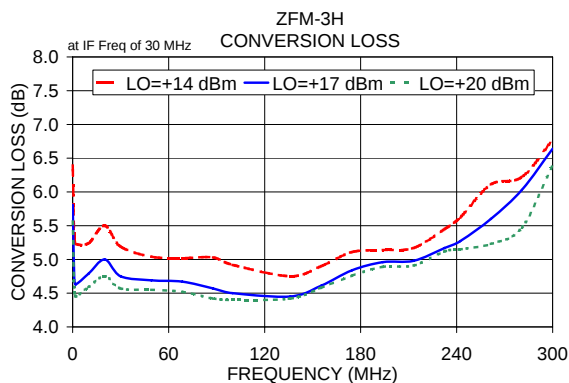
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Page 1 of 2

Performance Charts

ZFM-3H+ ZFM-3H



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