

Coaxial Frequency Mixer

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

ZFM-3H+



SMA version shown

CASE STYLE: K18

Connectors Model
BNC ZFM-3H+
SMA ZFM-3H-S(+)
BRACKET (OPTION "B")

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

Features

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

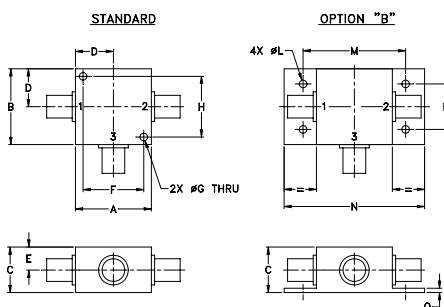
Applications

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

+RoHS Compliant

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

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

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF f_L - f_U	IF	Mid-Band m		Total Range		L		M		U		L		M		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

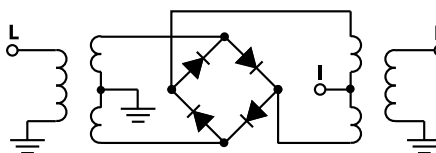
1 dB COMP.: +14 dBm typ.

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



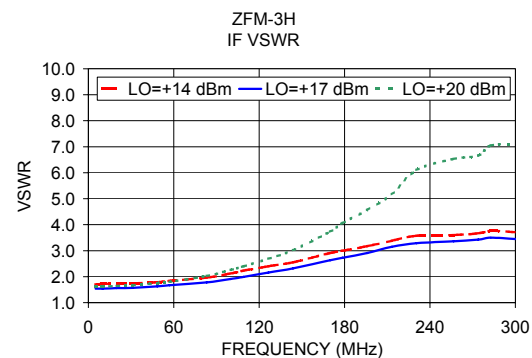
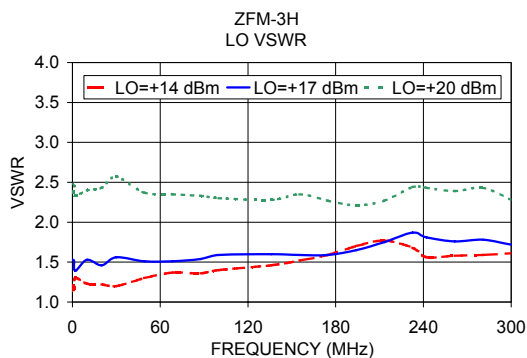
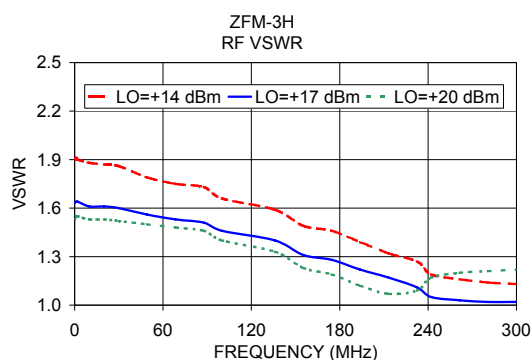
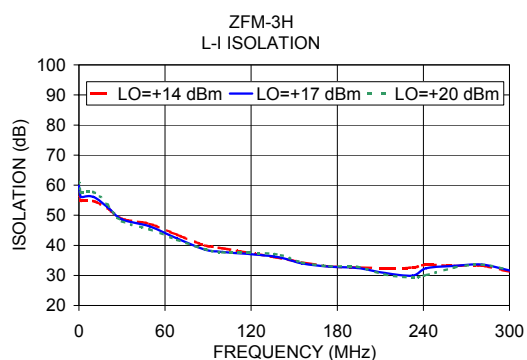
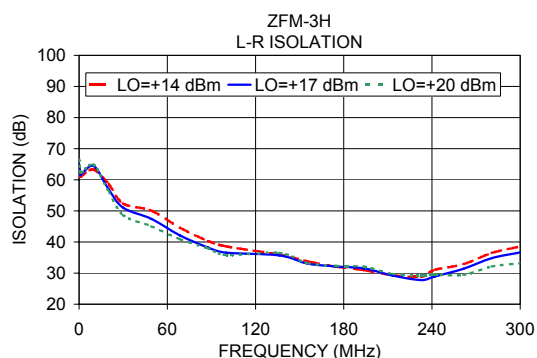
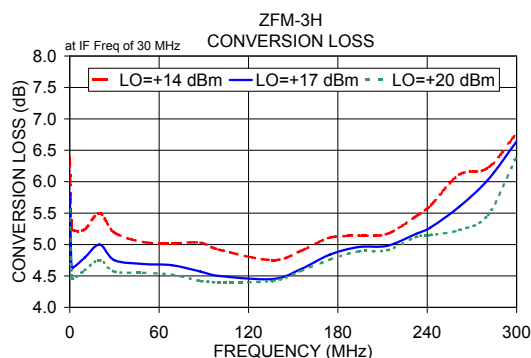
Notes

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