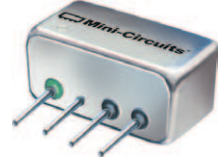


Plug-In

Frequency Mixer

Level 10 (LO Power +10 dBm) 10 to 2000 MHz

TFM-150+



CASE STYLE: B13
PRICE: \$51.00 ea. QTY (1-9)

+RoHS Compliant

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

Maximum Ratings

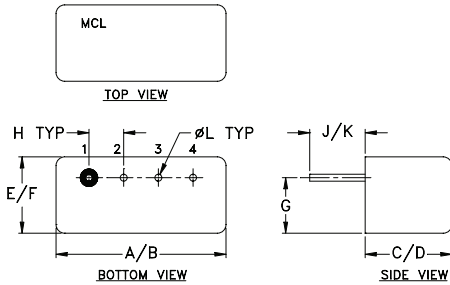
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

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

Pin Connections

LO	1
RF	4
IF	2
GROUND	3
CASE GROUND	3

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F
.480	.500	.390	.405	.210	.230
12.19	12.70	9.91	10.29	5.33	5.84
G	H	J	K	L	wt
.16	.100	.14	.20	.020	grams
4.06	2.54	3.56	5.08	0.51	2.3

Features

- low conversion loss, 6.19 dB typ.
- wideband, 10 to 2000 MHz
- rugged welded construction
- hermetically sealed

Applications

- satellite distribution
- cellular
- GPS
- ISM/GSM

Electrical Specifications

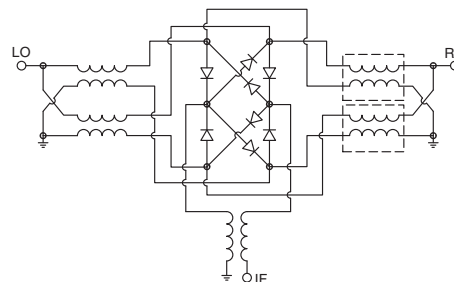
FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band		Total Range Max.	L	M		U		L	M		U				
f_c-f_u	DC-1000*	\bar{X}	σ			Typ.	Min.	Typ.	Min.		Typ.	Min.	Typ.	Min.	Typ.	Min.	
10-2000	DC-1000*	6.19	0.11	8.0	8.0*	32	25	35	25	35	25	33	20	30	20	30	20

1 dB COMP.: +5 dBm typ.
*Below 10 MHz IF, conversion loss increases up to 6 dB higher as frequency decreases to DC
L = low range [f_1 to $10 f_1$]
M = mid range [$10 f_1$ to $f_1/2$]
U = upper range [$f_1/2$ to f_1]

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 +10dBm	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm
10.00	40.00	6.45	25.80	24.40	1.62	1.69
20.00	50.00	6.61	30.46	29.11	1.29	1.49
130.61	100.61	6.30	36.94	35.84	1.29	1.39
251.21	221.21	6.42	37.51	37.82	1.34	1.36
432.12	402.12	6.38	36.22	37.58	1.38	1.34
500.00	470.00	6.61	35.79	36.42	1.49	1.30
552.73	522.73	6.47	35.50	35.14	1.60	1.29
673.33	643.33	6.53	34.67	33.34	1.62	1.28
793.94	763.68	6.64	34.16	31.81	1.70	1.26
914.55	884.43	6.67	32.34	30.81	1.79	1.26
974.85	944.91	6.11	31.59	30.10	1.89	1.22
1035.20	1005.40	7.04	30.74	29.56	2.02	1.20
1155.80	1125.60	7.24	30.26	30.08	2.07	1.20
1276.40	1246.50	6.75	29.72	30.93	2.13	1.18
1397.00	1366.80	6.57	28.85	31.94	2.13	1.13
1517.60	1487.50	6.59	28.61	31.80	2.05	1.07
1638.20	1608.00	6.63	27.94	29.65	1.88	1.12
1758.80	1728.70	6.91	28.39	26.17	1.45	1.18
1879.40	1849.50	7.01	30.98	26.61	1.43	1.21
2000.00	1970.00	7.24	32.51	24.79	1.55	1.26

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

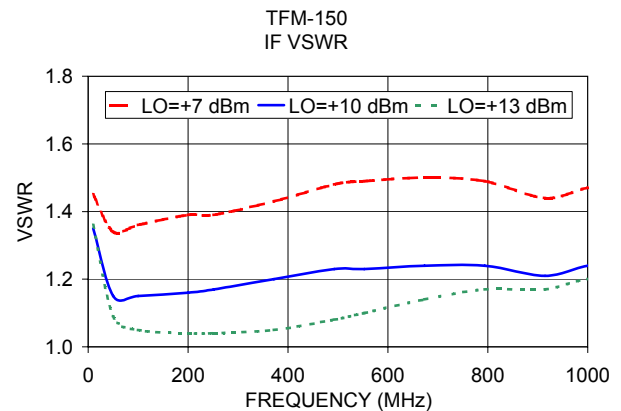
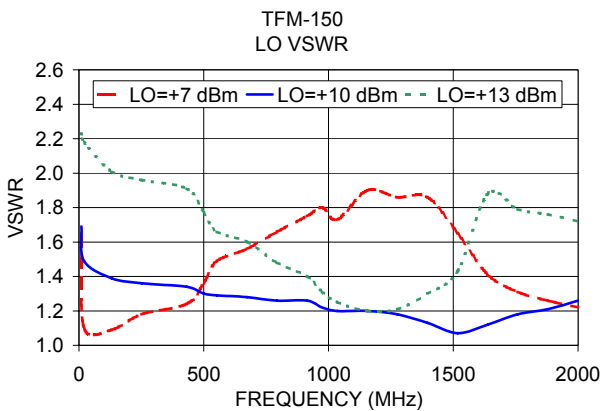
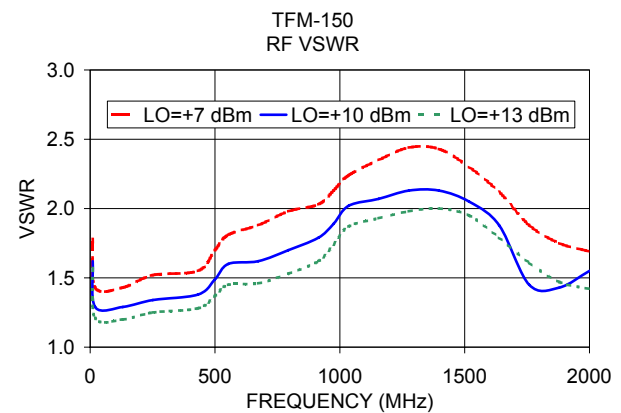
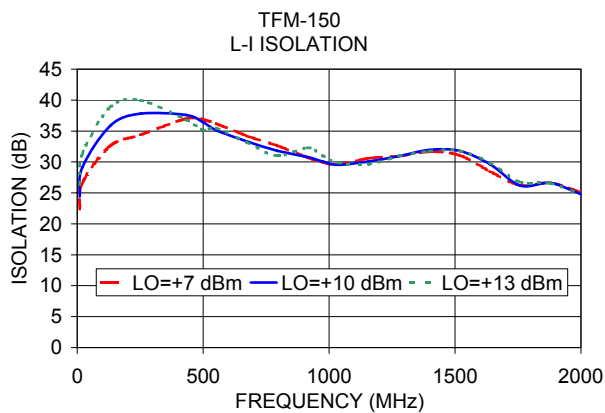
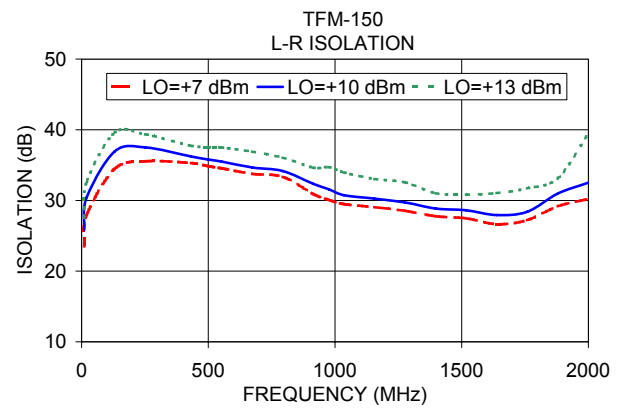
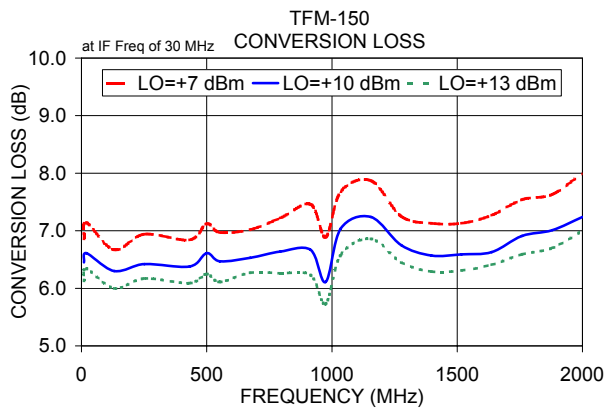
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For detailed performance specs & shopping online see web site

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