

Frequency Mixer

Level 7 (LO Power +7 dBm) 800 to 1250 MHz

TFM-12+



Generic photo used for illustration purposes only

CASE STYLE: B13

+RoHS Compliant

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

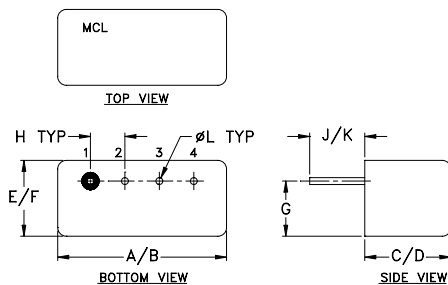
Maximum Ratings

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	4
RF	1
IF	2
GROUND	3
CASE GROUND	3

Outline Drawing



Outline Dimensions (inch)

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, 5.71 dB typ.
- good L-R isolation, 35 dB typ.
- rugged welded construction
- hermetically sealed

Applications

- cellular
- ISM/GSM
- PCS
- GPS

Electrical Specifications

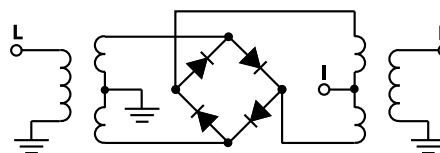
FREQUENCY (MHz)		CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
LO/RF	IF	Mid-Band		Total Range				
f_L - f_U		$\overline{X}$	σ	Max.	Typ.	Min.	Typ.	Min.
800-1250	50-90	6.86	0.14	7.5	35	25	30	20

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
745.22	675.22	7.40	38.23	28.83	3.64	1.85
805.68	735.68	7.28	37.29	28.22	3.48	1.78
866.15	796.15	7.19	36.88	27.64	3.27	1.72
926.61	856.61	7.08	36.55	27.18	3.05	1.64
987.08	917.08	6.95	36.61	26.63	2.78	1.55
1067.70	997.70	6.86	36.59	25.81	2.47	1.45
1128.16	1058.16	6.90	36.19	25.33	2.38	1.38
1208.78	1138.78	7.03	35.63	24.79	2.33	1.32
1269.25	1199.25	7.06	35.09	24.32	2.28	1.30
1349.87	1279.87	7.12	34.04	23.84	2.19	1.29

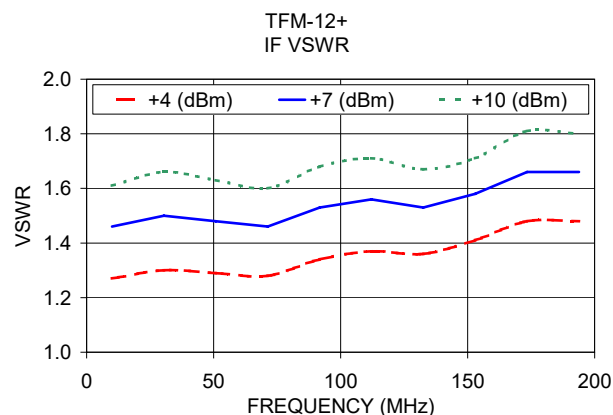
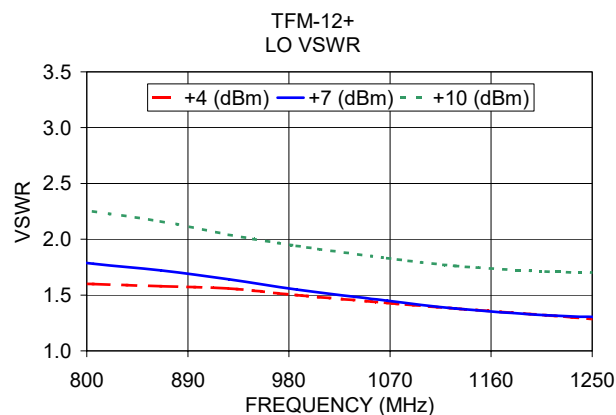
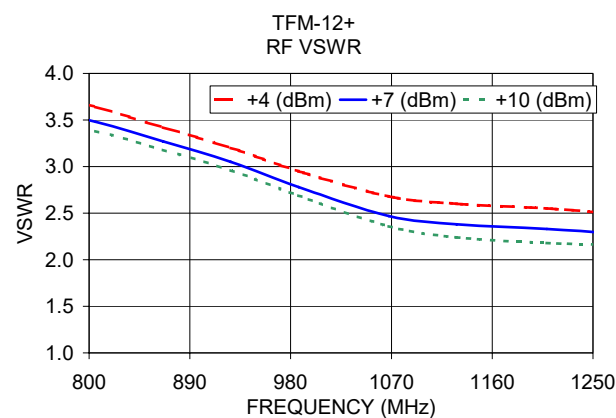
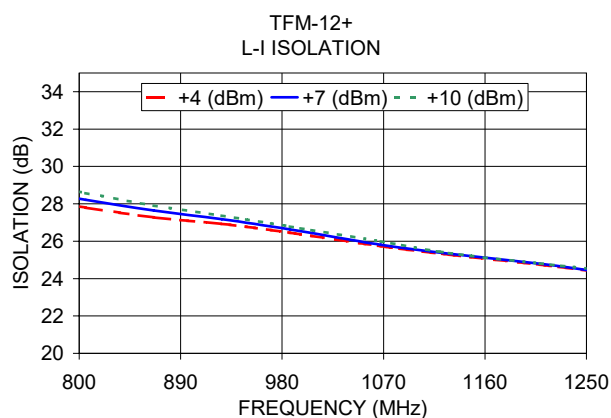
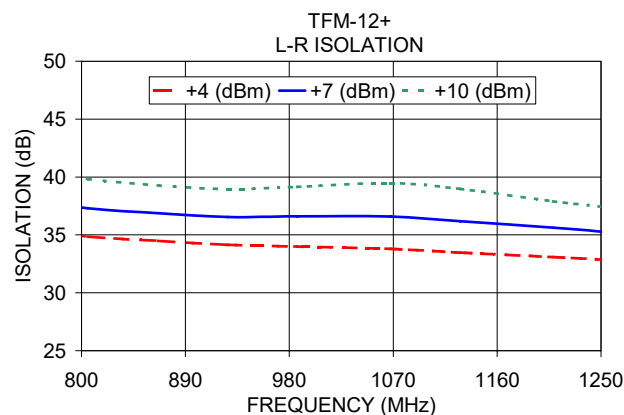
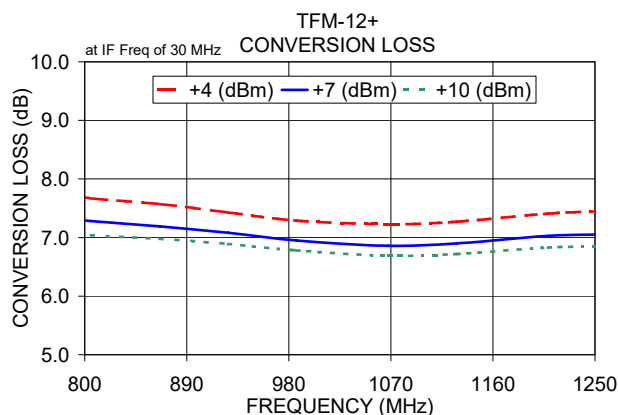
Electrical Schematic



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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