

Plug-In

Frequency Mixer

TUF-5+

Level 7 (LO Power + 7 dBm) 20 to 1500 MHz



CASE STYLE: B02
PRICE: \$12.70 ea. QTY (1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify 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

Pin Connections

LO	4
RF	1
IF	2
GROUND	3
CASE GROUND	3

Features

- low conversion loss, 5.7 dB typ.
- high L-R isolation, 42 dB typ.
- wideband, 20 to 1500 MHz
- rugged welded construction

Applications

- cellular
- satellite & distribution
- GSM/ISM

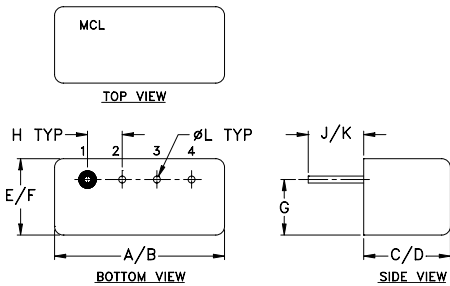
Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			IP3 @ CENTER BAND (dBm)										
		L	M	U	L	M	U											
20-1500	DC-1000	5.7	0.04	9.0	9.0	54	40	42	30	39	25	40	25	32	18	23	8	12

1 dB COMP.: +1 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 $f_U/2$]

Outline Drawing



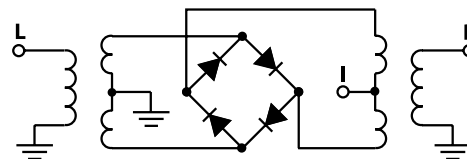
Outline Dimensions (inch/mm)

A	B	C	D	E	F
.480	.500	.240	.255	.210	.230
12.19	12.70	6.10	6.48	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	1.9

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
20.00	50.00	5.76	69.06	50.01	1.56	2.37
40.00	70.00	5.54	63.75	45.70	1.44	2.31
50.00	80.00	5.44	61.73	43.88	1.56	2.17
100.00	70.00	5.38	56.05	38.99	1.62	2.16
158.75	128.75	5.40	52.30	36.23	1.89	2.18
200.00	170.00	5.41	49.90	34.38	2.12	2.20
297.50	267.50	5.58	46.54	31.36	2.25	2.23
436.25	406.25	5.81	46.39	28.70	2.65	2.27
500.00	470.00	5.94	46.35	27.70	3.02	2.33
575.00	545.00	6.28	45.43	26.65	3.26	2.35
713.75	683.75	6.65	43.76	25.47	3.36	2.38
750.00	720.00	6.73	43.43	25.18	3.43	2.42
852.50	822.50	6.83	42.21	24.77	3.60	2.54
991.25	961.25	7.20	40.31	22.85	3.65	2.71
1000.00	970.00	7.15	40.23	22.65	3.65	2.84
1130.00	1100.00	7.28	38.87	19.85	3.62	2.90
1268.75	1238.00	7.27	38.46	17.22	3.58	3.10
1407.50	1377.50	7.29	37.61	14.48	3.50	3.39
1453.75	1423.75	7.22	37.14	13.58	3.42	3.62
1500.00	1470.00	7.38	36.87	12.98	3.39	3.76

Electrical Schematic



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RF/IF MICROWAVE COMPONENTS

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