

Frequency Mixer

Level 17 (LO Power +17 dBm) 100 to 1800 MHz

TUF-18DHSM+



CASE STYLE: NNN150
PRICE: \$26.20 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.

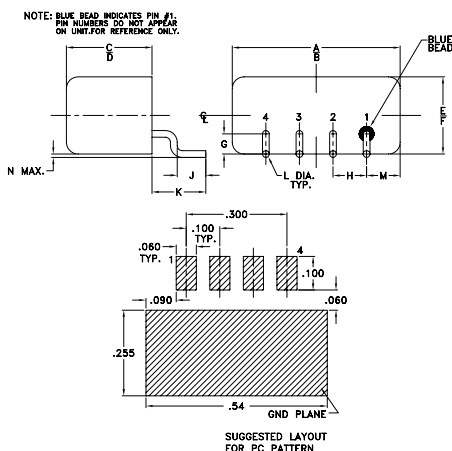
Maximum Ratings

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

Pin Connections

LO	4
RF	1
IF	2
GROUND	3
CASE GROUND	3

Outline Drawing

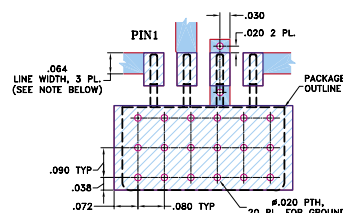


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.50	.48	.255	.240	.23	.21	.06
12.70	12.19	6.48	6.10	5.84	5.33	1.52

H	J	K	L	M	N	wt
.100	.09	.16	.020	.09	.005	grams
2.54	2.29	4.06	0.51	2.29	0.13	1.9

Demo Board MCL PIN : TB-201 Suggested PCB Layout (PL-081)



Features

- low conversion loss, 7.3 dB typ.
- excellent L-R isolation, 41 dB typ.
- high IP3, 27 dBm typ.
- wideband, 100 to 1800 MHz
- rugged welded construction

Applications

- airphone
- cellular
- PCS
- PCN

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 @ CENTER BAND (dBm)
LO/RF	IF	Mid-Band m		Total Range						
f_L - f_U		\bar{X}	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	
100-1800	50-750	7.3	0.15	8.5	9.0	41	23	33	20	27

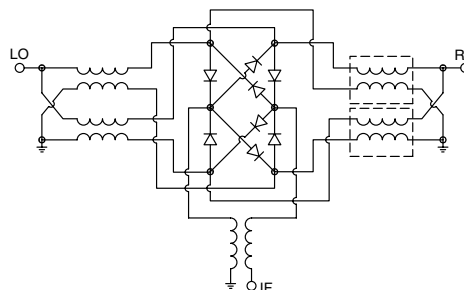
1 dB COMP.: +10 dBm typ.

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 +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
100.00	130.00	7.20	48.50	35.20	2.27	1.15
230.77	260.77	7.23	51.20	35.80	2.23	1.11
300.00	330.00	7.08	52.30	36.30	2.25	1.16
361.54	391.54	7.12	50.40	36.90	1.89	1.18
492.31	522.31	7.10	48.70	36.00	1.92	1.29
500.00	530.00	7.09	48.50	36.00	1.84	1.28
600.00	630.00	7.11	48.10	34.80	1.61	1.28
623.08	653.08	7.07	47.50	34.70	1.52	1.30
700.00	730.00	7.06	46.20	33.60	1.44	1.36
753.85	783.85	7.07	45.90	32.80	1.56	1.38
884.62	914.62	7.09	43.80	31.70	1.27	1.46
1000.00	1030.00	7.04	44.40	30.10	1.22	1.51
1015.39	1045.39	7.03	43.80	30.00	1.25	1.51
1146.15	1176.15	7.23	43.40	29.50	1.32	1.77
1276.92	1306.92	7.31	42.20	28.80	1.68	2.25
1407.69	1437.69	7.34	39.20	29.40	2.30	2.68
1500.00	1530.00	7.38	37.00	29.10	3.57	2.96
1538.46	1568.46	7.38	36.80	28.60	3.57	2.96
1669.23	1699.23	7.39	36.20	28.10	2.92	2.76
1800.00	1830.00	7.83	35.40	28.40	2.76	2.55

Electrical Schematic



Performance Charts

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