

Plug-In

Frequency Mixer

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

TUF-18DH+



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.

Pin Connections

LO	4
RF	1
IF	2
GROUND	3
CASE GROUND	3

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

- airplane
- cellular
- PCS
- PCN

CASE STYLE: B02
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.

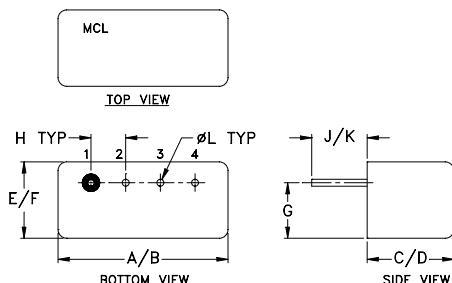
Electrical Specifications

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.	Typ.
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 $f_U/2$]

Outline Drawing



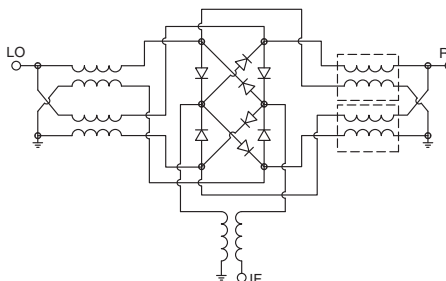
Outline Dimensions (inch/mm)

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 +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



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

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