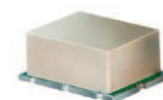


High IP3 Frequency Mixer

Level 17 (LO Power +17 dBm) 1500 to 2200 MHz

SYM-22H+
SYM-22H



Maximum Ratings

Operating Temperature	-40°C to 85°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	2
RF	1
IF	3
GROUND	4,5,6

Features

- low conversion loss, 5.6 dB typ.
- high IP3, 30 dBm typ.
- useable over 1000-2400 MHz
- good L-R isolation, 33 dB typ.; & L-I isolation, 38 dB typ.
- IF response to DC

Applications

- PCS
- cellular

CASE STYLE: TTT167
PRICE: \$9.95 ea. QTY (1-9)

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

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

Electrical Specifications

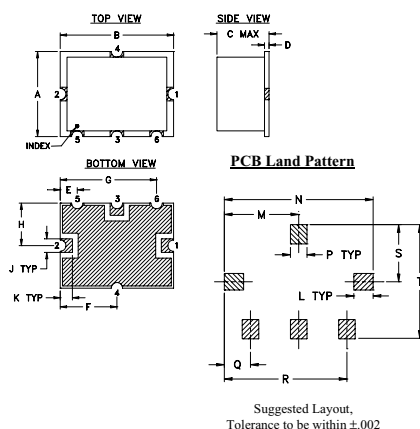
FREQUENCY (MHz)		CONVERSION LOSS (dB)		LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)	
LO/RF f_L - f_U	IF	Mid-Band m	Total Range Max.	Typ.	Min.	Typ.	Min.	Typ.	
		$\overline{X}$	σ						
1500-2200	DC-200	5.6	.30	8.8	33	22	38	22	30

1 dB COMP.: +14 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 +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
1500.00	1530.00	5.86	34.00	36.00	2.12	2.32
1546.67	1576.67	5.54	34.50	37.70	1.85	2.20
1593.33	1623.33	5.40	35.40	38.00	1.81	2.25
1600.00	1630.00	5.40	35.40	38.20	1.75	2.32
1640.00	1670.00	5.41	36.70	39.60	1.60	2.40
1686.67	1716.67	5.55	37.40	40.50	1.57	2.55
1700.00	1730.00	5.69	37.00	40.90	1.51	2.55
1733.33	1763.33	5.99	36.70	41.40	1.41	2.92
1780.00	1810.00	6.32	36.90	42.50	1.37	3.11
1800.00	1830.00	6.33	37.30	42.80	1.30	2.88
1826.67	1856.67	6.15	37.70	43.10	1.27	2.65
1873.33	1903.33	6.59	36.00	43.60	1.30	2.84
1900.00	1930.00	7.11	35.00	43.20	1.27	3.26
1920.00	1950.00	7.38	34.60	43.10	1.25	3.50
1966.67	1996.67	7.35	33.80	43.10	1.37	3.64
2013.33	2043.33	7.01	33.40	42.40	1.36	3.57
2060.00	2090.00	6.66	32.50	41.70	1.42	3.21
2106.67	2136.67	6.35	31.40	40.70	1.46	2.80
2153.33	2183.33	5.89	30.60	39.70	1.51	2.37
2200.00	2230.00	5.67	30.60	39.20	1.59	1.99

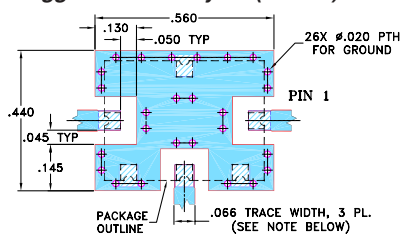
Outline Drawing



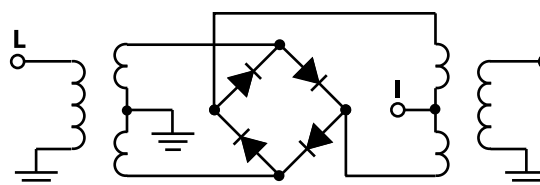
Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	J	K
.38	.50	.23	.020	.075	.250	.425	.187	.050	.050
9.65	12.70	5.84	0.51	1.91	6.35	10.80	4.75	1.27	1.27
L	M	N	P	Q	R	S	T	wt.	
.070	.270	.540	.060	.095	.445	.208	.415	grams	
1.78	6.86	13.72	1.52	2.41	11.30	5.28	10.54	0.8	

Demo Board MCL P/N: TB-12 Suggested PCB Layout (PL-079)



Electrical Schematic



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

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Performance Charts

