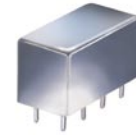


Plug-In Frequency Mixer

SRA-11H

Level 17 (LO Power +17 dBm) 10 to 3000 MHz



CASE STYLE: A01

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 | 8 |
| RF | 1 |
| IF | 3 |
| GROUND | 2,5,6,7 |
| CASE GROUND | 2,5,6,7 |
| NOT USED | 4 |

Features

- excellent conversion loss, 6.83 dB typ.
- good L-R isolation, 25 dB typ. L-I isolation, 25 dB typ.
- rugged welded construction
- hermetically sealed

Applications

- VHF
- MMDS
- PCS
- GPS
- defense & civil space systems

Electrical Specifications

| FREQUENCY (MHz) | | CONVERSION LOSS (dB) | | | | LO-RF ISOLATION (dB) | | | | | | LO-IF ISOLATION (dB) | | | | | |
|-----------------|---------|----------------------|----------|-------------|------|----------------------|------|------|------|------|------|----------------------|------|------|------|----|----|
| LO/RF | IF | Mid-Band | | Total Range | Max. | L | | M | | U | | L | | M | | U | |
| | | \bar{X} | σ | | | Typ. | Min. | Typ. | Min. | Typ. | Min. | Typ. | Min. | Typ. | Min. | | |
| 10-3000 | 10-1000 | 6.83 | .09 | 10.0 | 12.0 | 27 | 20 | 25 | 18 | 23 | 16 | 27 | 20 | 25 | 18 | 23 | 16 |

1 dB COMP.: +10 dBm typ.

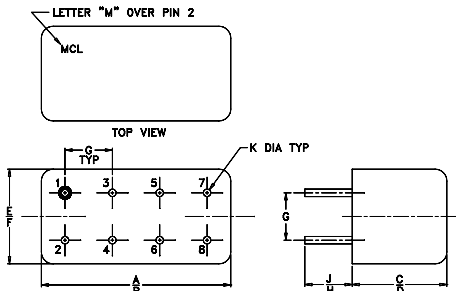
L = low range [f_1 to $10 f_1$]

m = mid band [$2 f_1$ to $f_1/2$]

M = mid range [$10 f_1$ to $f_1/2$]

U = upper range [$f_1/2$ to f_1]

Outline Drawing



NOTE: BLUE BEAD INDICATES PIN 1. PIN NUMBERS DO NOT APPEAR ON UNIT, FOR REFERENCE ONLY.

Outline Dimensions (inch/mm)

| A | B | C | D | E | F |
|-------|-------|------|-------|------|-------|
| .770 | .800 | .385 | .400 | .370 | .400 |
| 19.56 | 20.32 | 9.78 | 10.16 | 9.40 | 10.16 |
| G | H | J | K | wt | |
| .200 | .20 | .14 | .031 | | grams |
| 5.08 | 5.08 | 3.56 | 0.79 | | 5.2 |

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 |
| 10.00 | 40.00 | 6.43 | 32.26 | 35.01 | 1.13 | 2.07 |
| 20.00 | 50.00 | 6.58 | 33.52 | 36.23 | 1.07 | 2.19 |
| 103.44 | 73.44 | 6.60 | 32.25 | 33.97 | 1.08 | 2.01 |
| 200.00 | 170.00 | 6.78 | 30.89 | 32.03 | 1.13 | 1.96 |
| 290.31 | 260.31 | 6.75 | 29.76 | 30.61 | 1.18 | 1.91 |
| 500.00 | 470.00 | 6.94 | 28.74 | 29.28 | 1.29 | 1.83 |
| 570.63 | 540.69 | 6.81 | 28.80 | 29.04 | 1.34 | 1.81 |
| 757.50 | 727.50 | 7.00 | 28.06 | 28.08 | 1.48 | 1.81 |
| 944.38 | 913.91 | 7.05 | 28.00 | 26.87 | 1.66 | 1.80 |
| 1037.80 | 1007.40 | 7.37 | 28.67 | 26.49 | 1.72 | 1.74 |
| 1318.10 | 1288.00 | 6.81 | 27.69 | 26.66 | 1.92 | 1.69 |
| 1505.00 | 1474.90 | 6.68 | 27.57 | 27.97 | 1.99 | 1.65 |
| 1598.40 | 1568.30 | 6.65 | 27.30 | 28.78 | 1.75 | 1.91 |
| 1785.30 | 1755.00 | 6.71 | 27.75 | 28.96 | 1.89 | 1.91 |
| 1972.20 | 1942.10 | 6.57 | 29.51 | 31.44 | 1.76 | 1.75 |
| 2065.60 | 2035.10 | 6.76 | 28.94 | 33.79 | 1.68 | 1.66 |
| 2252.50 | 2222.10 | 6.61 | 30.22 | 36.80 | 1.68 | 1.49 |
| 2439.40 | 2408.60 | 6.63 | 31.19 | 37.00 | 1.69 | 1.14 |
| 2626.30 | 2596.00 | 6.95 | 30.21 | 30.13 | 1.49 | 1.26 |
| 3000.00 | 2969.30 | 8.58 | 32.46 | 26.88 | 1.90 | 2.47 |

Electrical Schematic

