*Non-Catalog Model*

# Frequency Mixer

# SRA-6H+

Level 17 (LO Power + 17 dBm)

**CASE STYLE : A01**

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

### Important Note

This is a non-catalog model and can be manufactured on specific request. Pricing and delivery information can be supplied upon request.

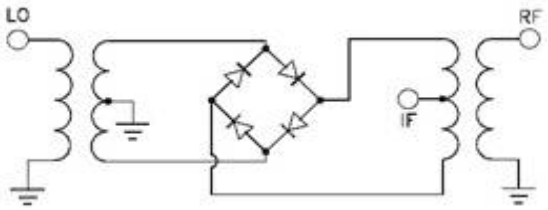
Please click "Back", and then click "Contact Us" for Applications support.

| ELECTRICAL SPECIFICATIONS 50Ω @ +25°C | | | | | |
|---|---|---|---|---|---|
| **Parameter** | | **Min.** | **Typ.** | **Max.** | **Units** |
| **Frequency** | **LO** ($f_L$ to $f_U$) | .01 | | 50 | MHz |
| | **RF** ($f_L$ to $f_U$) | .01 | | 50 | MHz |
| | **IF** | DC | | 50 | MHz |
| **Conversion Loss** | **mid band** | | 4.97 | 6 | dB |
| | **Total Range** | | | 7 | dB |
| **LO-RF Isolation** | **Low Range** | 45 | 50 | | dB |
| | **Mid Range** | 30 | 45 | | dB |
| | **Upper Range** | 25 | 35 | | dB |
| **LO-IF Isolation** | **Low Range** | 40 | 50 | | dB |
| | **Mid Range** | 35 | 47 | | dB |
| | **Upper Range** | 25 | 32 | | dB |

**Note:** Low Range = [$f_L$ to 10$f_L$] Mid Range = [10$f_L$ to $f_U$/2] Upper Range = [$f_U$/2 to $f_U$]
mid band = [2$f_L$ to $f_U$/2]

| MAXIMUM RATINGS | |
|---|---|
| **Operating Temperature** | -55°C to +100°C |
| **Storage Temperature** | -55°C to +100°C |
| **RF Power** | 200 mW |
| **IF Current** | 40 mA |

## Electrical Schematics



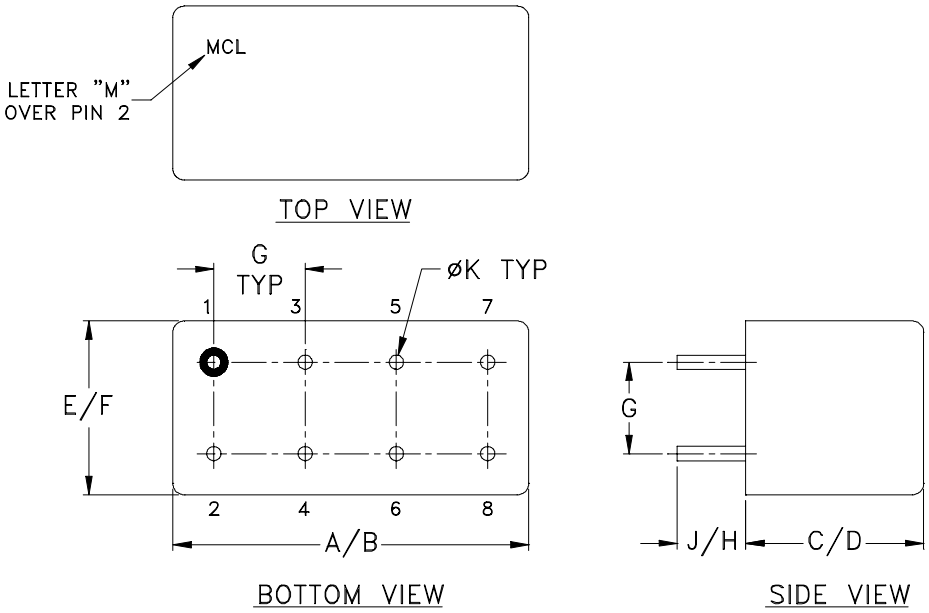

| PIN CONNECTIONS | |
|---|---|
| **LO** | 8 |
| **RF** | 1 |
| **IF** | 3 & 4^ |
| **GROUND EXT.** | 2,5,6,7 |
| **GROUND CASE** | 2 |

^ pins must be connected together externally

# Case Style A

**A01**
**A04**
**A05**
**A06**

## Outline Dimensions




| CASE# | A | B | C | D | E | F | G | H | J | K | WT, GRAM |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A01 | .770 (19.56) | .800 (20.32) | .385 (9.78) | .400 (10.16) | .370 (9.40) | .400 (10.16) | .200 (5.08) | .20 (5.08) | .14 (3.56) | .031 (.79) | 5.2 |
| A04 | | | .200 (5.08) | .210 (5.33) | | | | | | | 3.7 |
| A05 | | | .240 (6.10) | .250 (6.35) | | | | | | | 3.7 |
| A06 | | | .285 (7.24) | .310 (7.87) | | | | | | | 5.2 |

**Dimensions are in inches (mm). Tolerances: 2 Pl. ± .03; 3 Pl. ± .015**

### Notes:

1. Header material: C.R.S.
   Pin material: #52 alloy.
   Cover material: Cupro-Nickel.
2. Pin finish: Electro Tin-Silver.
3. Insulated spacer available. Request P/N B14-045-01.
4. Tolerance on pin diameter +/-.005 inch.
5. Glass meniscus 0.015 inch max.
6. Blue bead indicates Pin 1. Pin numbers do not appear on unit, for reference only.


Mini-Circuits®
INTERNET http://www.minicircuits.com
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661
Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010
Mini-Circuits ISO 9001 & ISO 14001 Certified

Mini-Circuits

# Environmental Specifications ENV01

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

| Specification | Test/Inspection Condition | Reference/Spec |
|---|---|---|
| Operating Temperature | -55° to 100° C<br>Ambient Environment | Individual Model Data Sheet |
| Storage Temperature | -55° to 100° C<br>Ambient Environment | Individual Model Data Sheet |
| Thermal Shock | -55° to 100°C, 100 cycles | MIL-STD-202, Method 107, Condition A-3, except +100°C |
| Vibration (High Frequency) | 20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36) | MIL-STD-202, Method 204, Condition D |
| Mechanical Shock | 50g, 11 ms, 1/2-sine, 18 shocks: 3 each direction, each of 3 axes | MIL-STD-202, Method 213, Condition A |
| Moisture Resistance | 10 cycles, 24 hours per cycle | MIL-STD-202, Method 106, Condition A, except 50°C and end point electrical test done within 12 hours |
| Solderability | 10X Magnification | J-STD-002, 95% Coverage |
| Resistance to Solder Heat | 260°C for 10 seconds | MIL-STD-202, Method 210, Condition B |
| Marking Resistance to Solvents | Isopropyl alcohol + mineral spirits at 25°C; terpene defluxer at 25°C;<br>distilled water + proylene glycol monomethyl ether + monoethanolamine at 63°C to 70°C | MIL-STD-202, Method 215 |
| Terminal Strength | 4 1/2 Pound Pull | MIL-STD-202, Method 211, Condition A |

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

| Specification | Test/Inspection Condition | Reference/Spec |
|---|---|---|
| Gross Leak | 125°C Bubble Test | MIL-STD-202, Method 112, Condition D |
| Barometric Pressure | 100,000 Feet | MIL-STD-202, Method 105, Condition D |