## Surface Mount

# **RF Transformer**

0.05 to 200 MHz



### CASE STYLE: W38

#### +RoHS Compliant

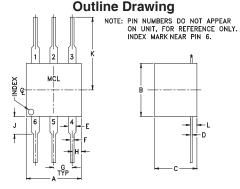
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### **Maximum Ratings**

| Operating Temperature                                     | -20°C to 85°C  |  |  |
|---|----------------|--|--|
| Storage Temperature                                       | -55°C to 100°C |  |  |
| RF Power  | 250mW          |  |  |
| DC Current  | 30mA           |  |  |
| Permanent damage may easur if any of those limits are ex- |                |  |  |

#### **Pin Connections**

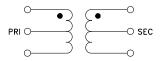
| PRIMARY DOT   | 4 |
|---------------|---|
| PRIMARY       | 6 |
| PRIMARY CT    | 5 |
| SECONDARY DOT | 3 |
| SECONDARY     | 1 |
| SECONDARY CT  | 2 |
|               |   |



### Outline Dimensions (inch )

| F     | Е    | D    | С    | В    | Α    |
|-------|------|------|------|------|------|
| .020  | .042 | .010 | .23  | .27  | .30  |
| 0.51  | 1.07 | 0.25 | 5.84 | 6.86 | 7.62 |
|       |      |      |      |      |      |
| wt    | L    | K    | J    | Н    | G    |
| grams | .036 | .31  | .09  | .05  | .100 |
| 0.50  | 0.91 | 7.87 | 2.29 | 1.27 | 2.54 |
|       |      |      |      |      |      |

#### Config. B



#### **Features**

- wideband, 0.05 to 200 MHz
- · good return loss
- also available with surface mount gull wing (KK81) plug-in (X65) leads

#### **Applications**

- HF/VHF
- · impedance matching
- balanced antennas

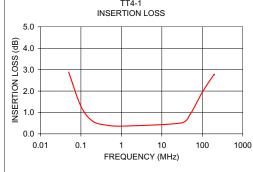
#### **Transformer Electrical Specifications**

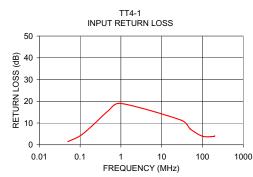
| Ω<br><b>RATIO</b><br>(Secondary/Primary) | FREQUENCY<br>(MHz) | INSERTION LOSS* |             |             |
|--|--------------------|-----------------|-------------|-------------|
|  |                    | 3 dB<br>MHz     | 2 dB<br>MHz | 1 dB<br>MHz |
| 3  | 0.05-200           | 0.05-200        | 0.2-50      | 1-30        |

<sup>\*</sup> Insertion Loss is referenced to mid-band loss, 0.4 dB typ.

#### **Typical Performance Data**

| FREQUENCY<br>(MHz) | INSERTION<br>LOSS<br>(dB) | INPUT<br>R. LOSS<br>(dB) |  |
|--------------------|---------------------------|--------------------------|--|
| 0.05               | 2.88                      | 1.46                     |  |
| 0.10               | 1.29                      | 4.13                     |  |
| 0.20               | 0.58                      | 8.81                     |  |
| 0.50               | 0.39                      | 15.77                    |  |
| 1.00               | 0.36                      | 19.03                    |  |
| 30.00              | 0.51                      | 11.31                    |  |
| 50.00              | 0.91                      | 7.28                     |  |
| 100.86             | 1.96                      | 3.92                     |  |
| 195.15             | 2.78                      | 3.87                     |  |
| 200.00             | 2.76                      | 4.08                     |  |





- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

  B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

  C. The parts covered by this specification document 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.ninicircuits.com/MCLStore/terms.jsp