

# Surface Mount RF Transformer

50Ω 0.02 to 250 MHz

## T4-6T-KK81+ T4-6T-KK81



### Maximum Ratings

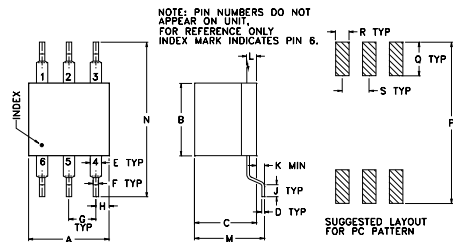
|                       |                |
|-----------------------|----------------|
| Operating Temperature | -20°C to 85°C  |
| Storage Temperature   | -55°C to 100°C |
| RF Power              | 0.25W          |
| DC Current            | 30mA           |

Permanent damage may occur if any of these limits are exceeded.

### Pin Connections

|               |   |
|---------------|---|
| PRIMARY DOT   | 4 |
| PRIMARY       | 6 |
| SECONDARY DOT | 3 |
| SECONDARY     | 1 |
| SECONDARY CT  | 2 |
| NOT USED      | 5 |

### Outline Drawing



### Outline Dimensions (inch/mm)

| A    | B    | C    | D     | E     | F    | G    | H    | J     |
|------|------|------|-------|-------|------|------|------|-------|
| .30  | .27  | .23  | .010  | .042  | .020 | .100 | .05  | .05   |
| 7.62 | 6.86 | 5.84 | 0.25  | 1.07  | 0.51 | 2.54 | 1.27 | 1.27  |
| K    | L    | M    | N     | P     | Q    | R    | S    | wt    |
| .020 | .036 | .26  | .575  | .600  | .125 | .050 | .100 | grams |
| 0.51 | 0.91 | 6.60 | 14.61 | 15.24 | 3.18 | 1.27 | 2.54 | 0.50  |

### Features

- wideband, 0.02 to 250 MHz
- excellent return loss
- also available with flat-pack (W38), plug-in (X65) leads

### Applications

- impedance matching
- push-pull amplifier

CASE STYLE: KK81  
PRICE: \$5.65 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.

### Transformer Electrical Specifications

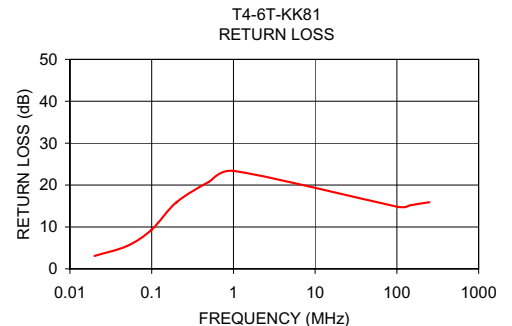
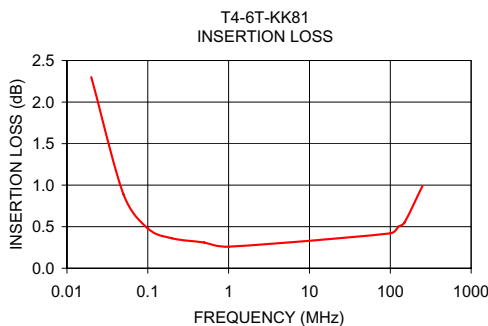
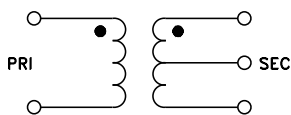
| Ω<br>RATIO<br>(Secondary/Primary) | FREQUENCY<br>(MHz) | INSERTION LOSS* |             |             |
|-----------------------------------|--------------------|-----------------|-------------|-------------|
|                                   |                    | 3 dB<br>MHz     | 2 dB<br>MHz | 1 dB<br>MHz |
| 4                                 | 0.02-250           | 0.02-250        | 0.05-150    | 0.1-100     |

\*Insertion Loss is referenced to mid-band loss, 0.25 dB typ.

### Typical Performance Data

| FREQUENCY<br>(MHz) | INSERTION<br>LOSS<br>(dB) | INPUT<br>R. LOSS<br>(dB) |
|--------------------|---------------------------|--------------------------|
| 0.02               | 2.30                      | 3.08                     |
| 0.05               | 0.89                      | 5.47                     |
| 0.10               | 0.48                      | 9.35                     |
| 0.20               | 0.36                      | 15.86                    |
| 0.50               | 0.31                      | 20.74                    |
| 1.00               | 0.26                      | 23.39                    |
| 100.00             | 0.42                      | 14.83                    |
| 125.01             | 0.50                      | 14.73                    |
| 150.00             | 0.55                      | 15.23                    |
| 250.00             | 0.99                      | 15.91                    |

### Config. A



**Mini-Circuits®**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine [www.minicircuits.com](http://www.minicircuits.com) Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

For detailed performance specs & shopping online see web site

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](http://www.minicircuits.com/MCLStore/terms.jsp).

REV. A  
M98898  
T4-6T-KK81  
IG/TD/CP  
070625