

# Surface Mount RF Transformer

50Ω 0.004 to 300 MHz

## TT1-6-KK81+ TT1-6-KK81



CASE STYLE: KK81

**+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 occur if any of these limits are exceeded.

### Pin Connections

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

### Features

- wideband, 0.004 to 300 MHz
- good return loss
- also available with plug-in (X65) and flat-pack (W38) leads

### Applications

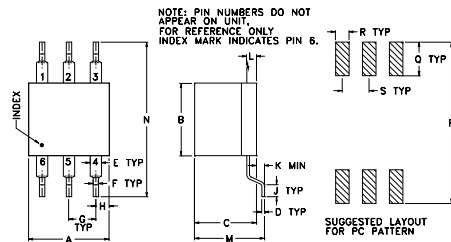
- HF/VHF
- impedance matching
- balanced antenna

### Transformer Electrical Specifications

| Ω RATIO | FREQUENCY (MHz) | INSERTION LOSS* |          |          |
|---------|-----------------|-----------------|----------|----------|
|         |                 | 3 dB MHz        | 2 dB MHz | 1 dB MHz |
| 1       | 0.004-300       | 0.004-300       | 0.02-200 | 0.1-50   |

\* Insertion Loss is specified with input at pin 4 and output at pin 1 with pins 6 & 3 grounded and pins 2 & 5 open.

### Outline Drawing



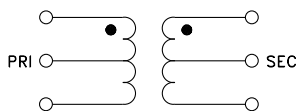
### Outline Dimensions (inch)

| 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  |

### Typical Performance Data

| FREQUENCY (MHz) | INSERTION LOSS (dB) | INPUT R. LOSS (dB) |
|-----------------|---------------------|--------------------|
| 0.004           | 2.53                | 4.71               |
| 0.020           | 0.29                | 15.34              |
| 1.150           | 0.10                | 37.84              |
| 100.860         | 0.89                | 10.71              |
| 151.510         | 1.10                | 9.32               |
| 200.000         | 1.08                | 9.41               |
| 280.250         | 0.87                | 12.74              |
| 350.000         | 0.81                | 24.39              |
| 430.250         | 1.11                | 11.24              |
| 500.000         | 2.74                | 6.16               |

### Config. B



### Notes

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