

Plug-In

# RF Transformer

50Ω 0.2 to 150 MHz

T14-1-X65+



Generic photo used for illustration purposes only  
CASE STYLE: X65

**+RoHS Compliant**

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

## Maximum Ratings

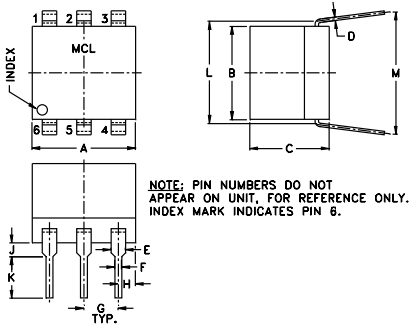
|                       |                |
|-----------------------|----------------|
| Operating Temperature | -20°C to 85°C  |
| Storage Temperature   | -55°C to 100°C |
| RF Power              | 250mW          |
| DC Current            | 30mA           |

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

## Pin Connections

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

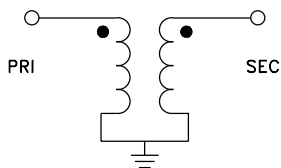
## Outline Drawing



## Outline Dimensions (inch/mm)

|      |      |      |      |      |       |      |
|------|------|------|------|------|-------|------|
| A    | B    | C    | D    | E    | F     | G    |
| .30  | .27  | .23  | .010 | .042 | .020  | .100 |
| 7.62 | 6.86 | 5.84 | 0.25 | 1.07 | 0.51  | 2.54 |
| H    | J    | K    | L    | M    | wt    |      |
| .05  | .04  | .11  | .300 | .35  | grams |      |
| 1.27 | 1.02 | 2.79 | 7.62 | 8.89 | 0.50  |      |

## Config. D



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

## Features

- wideband, 0.2 to 150 MHz
- good return loss
- also available with flat-pack (W38) & surface mount gull-wing (KK81) leads

## Applications

- impedance matching
- radio communication

## Transformer Electrical Specifications

| Ω RATIO<br>(Secondary/Primary) | FREQUENCY<br>(MHz) | INSERTION LOSS* |             |             |
|--------------------------------|--------------------|-----------------|-------------|-------------|
|                                |                    | 3 dB<br>MHz     | 2 dB<br>MHz | 1 dB<br>MHz |
| 14                             | 0.2-150            | 0.2-150         | 0.5-100     | 2-50        |

\* Insertion Loss is referenced to mid-band loss, 0.6 dB typ.

## Typical Performance Data

| FREQUENCY<br>(MHz) | INSERTION<br>LOSS<br>(dB) | INPUT<br>R. LOSS<br>(dB) |
|--------------------|---------------------------|--------------------------|
| 0.20               | 1.96                      | 8.58                     |
| 0.41               | 1.20                      | 12.75                    |
| 1.48               | 0.81                      | 16.38                    |
| 10.09              | 0.54                      | 13.93                    |
| 39.40              | 0.80                      | 4.69                     |
| 86.71              | 1.63                      | 1.60                     |
| 104.96             | 2.08                      | 1.21                     |
| 118.91             | 2.44                      | 1.01                     |
| 138.49             | 2.95                      | 0.83                     |
| 150.00             | 3.28                      | 0.76                     |

