

top hat®  
Balanced  
**RF Transformer**

75Ω      5 to 1200 MHz      1:2 Ratio

**TRS2-1T-1+**

**Features**

- suitable for tin/lead and RoHS solder systems
- wideband, 5 to 1200 MHz
- balanced transmission line
- good return loss, 20 dB typ. at 1 dB band
- excellent amplitude unbalance, 0.3 dB typ.
- aqueous washable

**Applications**

- balanced to unbalanced transformation
- push-pull amplifiers
- PCS/DCS
- cable TV
- cellular



CASE STYLE: TT1618

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

**Available Tape and Reel at no extra cost**

| Reel Size | Devices/Reel     |
|-----------|------------------|
| 7"        | 20, 50, 100, 200 |
| 13"       | 500, 1000        |

**Electrical Specifications at 25°C**

| Parameter                           | Frequency (MHz) | Min. | Typ. | Max. | Unit   |
|-------------------------------------|-----------------|------|------|------|--------|
| Impedance Ratio (secondary/primary) |                 |      | 2    |      |        |
| Frequency Range                     |                 | 5    |      | 1200 | MHz    |
| Insertion Loss (avg)*               | 5 - 600         | —    | 0.5  | 1.0  | dB     |
|                                     | 600 - 1000      | —    | 1.0  | 1.9  |        |
|                                     | 1000 - 1200     | —    | 1.7  | 2.3  |        |
| Amplitude Unbalance                 | 5 - 600         | —    | 0.3  | 1.0  | dB     |
|                                     | 600 - 1000      | —    | 0.6  | 1.6  |        |
|                                     | 1000 - 1200     | —    | 0.6  | 1.9  |        |
| Phase Unbalance                     | 5 - 50          | —    | 0.2  | 3    | Degree |
|                                     | 50 - 1200       | —    | 3    | 9    |        |
| Input Return Loss Single Ended      | 5 - 50          | 17   | 22   | —    | dB     |
|                                     | 50 - 1000       | 14   | 22   | —    |        |
|                                     | 1000 - 1200     | 9    | 17   | —    |        |

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

**Maximum Ratings**

| Parameter             | Ratings        |
|-----------------------|----------------|
| Operating Temperature | -40°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**

| Function      | Pin Number |
|---------------|------------|
| PRIMARY DOT   | 1          |
| PRIMARY       | 4          |
| SECONDARY DOT | 3          |
| SECONDARY     | 2          |

**Config. P1**

