

## Features

- Frequency Range 2 MHz to 1000 MHz
- Low Cost and RoHS Compliant
- Transmission Line
- Industry Standard SMT package
- Available in Tape-and -Reel
- $50 \Omega$ Characteristic Impedance


## Applications

- Broadband/CATV
- Wireless


## Product Description

The RFXF3553 Transformer is designed for applications that require very small, low cost, and highly reliable surface mount components. Applications may be found in broadband, wireless and other communications systems. These units are built Lead-Free and RoHS compliant and feature welded wire construction for increased reliability. S-Parameters are available on request.

## Ordering Information

| Part Number | Description | Reel Size | Package |
| :--- | :--- | :--- | ---: |
| RFXF3553SB | 2 MHz to $1000 \mathrm{MHz} \mathrm{1:4} \mathrm{SMT} \mathrm{Transformer}$ | N/A | 5-piece bag |
| RFXF3553SQ | 2 MHz to 1000 MHz 1:4 SMT Transformer | N/A | 25-piece bag |
| RFXF3553SR | 2 MHz to 1000 MHz 1:4 SMT Transformer | $13 "$ | 100 piece reel |
| RFXF3553TR13 | 2 MHz to 1000 MHz 1:4 SMT Transformer | $13 "$ | 1000 piece reel |

## Optimum Technology Matching ${ }^{\circledR}$ Applied

| $\square$ GaAs HBT | $\square$ SiGe BiCMOS | $\square$ GaAs pHEMT | $\square$ GaN HEMT |
| :--- | :--- | :--- | :--- |
| $\square$ GaAs MESFET | $\square$ Si BiCMOS | $\square$ Si CMOS | $\square$ BiFET HBT |
| $\square$ InGaP HBT | $\square$ SiGe HBT | $\square$ Si BJT | $\square$ LDMOS |

## Absolute Maximum Ratings

| Parameter | Rating | Unit |
| :--- | :---: | :---: |
| RF Power | 2 | W |
| Operating Temperature | -40 to +85 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature | -55 to +100 | ${ }^{\circ} \mathrm{C}$ |

Caution! ESD sensitive device.
Exceeding any one or a combination of the Absolute Maximum Rating conditions may cause permanent damage to the device. Extended application of Absolute Maximum Rating conditions to the device may reduce device reliability. Specified typical perfor mance or functional operation of the device under Absolute Maximum Rating conditions is not implied

RoHS status based on EUDirective2002/95/EC (at time of this document revision).
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| Parameter | Specification |  |  | Unit | Condition |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Min. | Typ. | Max. |  |  |
|  |  |  |  |  | Typical values represent Mid-Band performance at $25^{\circ} \mathrm{C}$ |
| Frequency Range | 2 |  | 1000 | MHz |  |
| Insertion Loss <1 dB | 2 |  | 400 | MHz |  |
| Insertion Loss <2 dB | 2 |  | 1000 | MHz |  |
| Insertion Loss <3 dB | - |  | - | MHz |  |
| Amplitude Balance |  | 0.2 | 1.0 | dB |  |
| Phase Balance |  | 3 | 10 | - |  |
| Impedance Ratio |  | 1:4 |  |  |  |
| Type - Transmission Line | Unb | ced to | ced |  |  |

RFXF3553

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Amplitude Balance



Phase Balance


Pin Out

| Pin | Function |
| :---: | :---: |
| 1 | Secondary Dot |
| 2 | Secondary CT |
| 3 | Secondary |
| 4 | Primary Dot |
| 5 | Primary |

## Package Drawing - S20

Dimensions in inches (millimeters)


