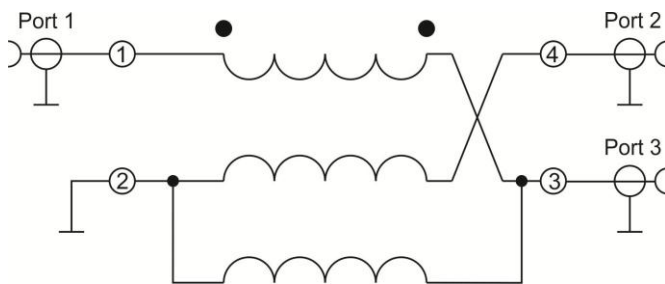


# RFXF0010

1:1 SMT Transformer  
45MHz to 1200MHz

The RFXF0010 transformer is designed for applications that require 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. S-Parameters are available on request.



Functional Block Diagram



Package: SP5

## Features

- 45MHz to 1200MHz Operation
- Low Cost and RoHS Compliant
- Industry Standard SMT Package
- Available in Tape-and-Reel
- 75  $\Omega$  Characteristic Impedance
- Tertiary Balance Winding

## Applications

- Broadband/CATV
- Wireless

## Ordering Information

|              |                                 |
|--------------|---------------------------------|
| RFXF0010SB   | Sample bag with 5 pieces        |
| RFXF0010SQ   | Sample bag with 25 pieces       |
| RFXF0010SR   | 13" Sample reel with 100 pieces |
| RFXF0010TR13 | 13" Reel with 1000 pieces       |

## Absolute Maximum Ratings

| Parameter                   | Rating      | Unit |
|-----------------------------|-------------|------|
| RF Power                    | 2           | W    |
| Operating Temperature Range | -40 to +100 | °C   |
| Storage Temperature Range   | -55 to +100 | °C   |



RoHS (Restriction of Hazardous Substances): Compliant per EU Directive 2011/65/EU.

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 performance or functional operation of the device under Absolute Maximum Rating conditions is not implied.

## Nominal Operating Parameters

| Parameter                  | Specification          |     |      | Unit | Condition   |
|----------------------------|------------------------|-----|------|------|---|
|                            | Min                    | Typ | Max  |      |   |
| <b>General Performance</b> |                        |     |      |      | <b>T=25°C.</b>  |
| Operating Frequency Range  | 45                     |     | 1200 | MHz  |   |
| Insertion Loss             |                        | 1.1 | 1.3  | dB   | 45 MHz to 100 MHz                                     |
|                            |                        | 0.8 | 1.1  | dB   | 100 MHz to 600 MHz                                    |
|                            |                        | 0.8 | 1.1  | dB   | 600 MHz to 1200 MHz                                   |
| Input Return Loss          | 14                     | 16  |      | dB   | 45 MHz to 100 MHz                                     |
|                            | 18                     | 20  |      | dB   | 100 MHz to 600 MHz                                    |
|                            | 13                     | 15  |      | dB   | 600 MHz to 1200 MHz                                   |
| Amplitude Balance          |                        | 0.2 | 0.5  | dB   | 45 MHz to 100 MHz                                     |
|                            |                        | 0.2 | 0.4  | dB   | 100 MHz to 600 MHz                                    |
|                            |                        | 0.8 | 1.1  | dB   | 600 MHz to 1200 MHz                                   |
| Phase Balance              |                        | 0.8 | 6.0  | °    | 45 MHz to 100 MHz, Nominal Phase Difference is 180°   |
|                            |                        | 3.4 | 6.0  | °    | 100 MHz to 600 MHz, Nominal Phase Difference is 180°  |
|                            |                        | 3.9 | 6.0  | °    | 600 MHz to 1200 MHz, Nominal Phase Difference is 180° |
| Impedance Ratio            | 1:1                    |     |      |      |   |
| Type – Transmission Line   | Unbalanced to Balanced |     |      |      |   |

Typical Performance: T=25°C unless otherwise noted

