

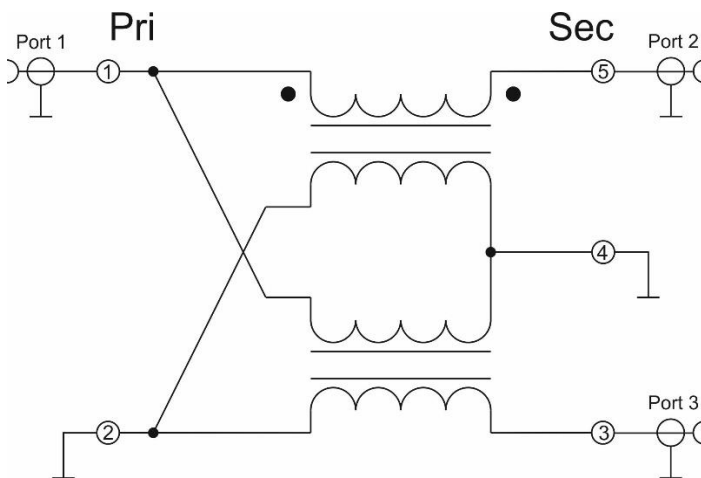
# RFXF0008

1:2.78 SMT Transformer  
45MHz to 1218MHz



Package: SP6

The RFXF0008 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

## Features

- 45MHz to 1218MHz Operation
- Low Cost and RoHS Compliant
- Industry Standard SMT Package
- Available in Tape-and-Reel
- 75  $\Omega$  Characteristic Impedance

## Applications

- Broadband/CATV
- Wireless

## Ordering Information

|              |                                 |
|--------------|---------------------------------|
| RFXF0008SB   | Sample bag with 5 pieces        |
| RFXF0008SQ   | Sample bag with 25 pieces       |
| RFXF0008SR   | 13" Sample reel with 100 pieces |
| RFXF0008TR13 | 13" Reel with 1000 pieces       |

RFXF0008

## Absolute Maximum Ratings

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



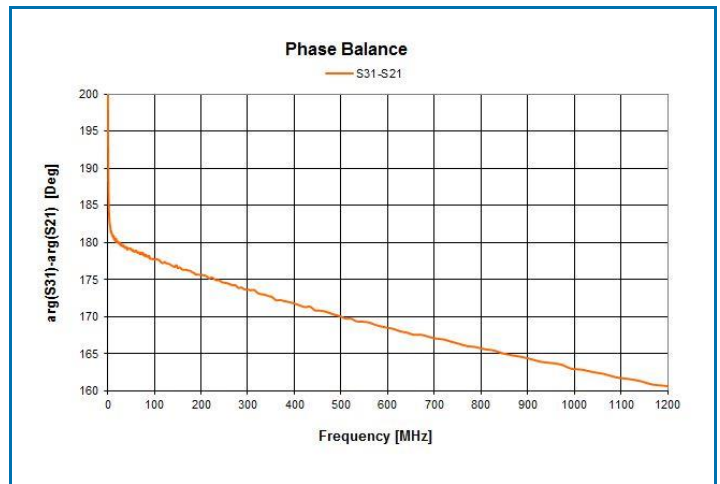
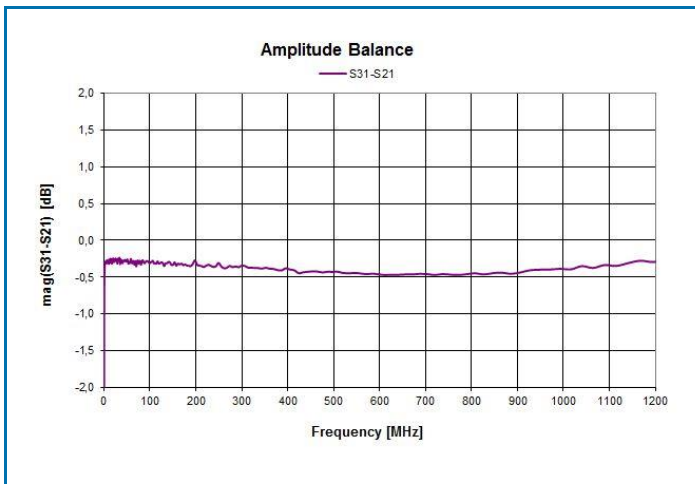
RoHS (Restriction of Hazardous Substances): Compliant per EU Directive 2011/65/EU

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  |      |                                                        |
| General Performance. Typical values represent Mid Band performance at T=25°C |                      |     |      |      |                                                        |
| Operating Frequency Range                                                    | 45                   |     | 1218 | MHz  |                                                        |
| Insertion Loss                                                               |                      | 1.6 | 2.0  | dB   | 45 MHz to 200 MHz                                      |
|                                                                              |                      | 1.5 | 2.0  | dB   | 200 MHz to 600 MHz                                     |
|                                                                              |                      | 1.9 | 2.5  | dB   | 600 MHz to 1000 MHz                                    |
|                                                                              |                      | 2.2 | 2.8  | dB   | 1000 MHz to 1218 MHz                                   |
| Input Return Loss                                                            | 12                   | 14  |      | dB   | 45 MHz                                                 |
|                                                                              | 12                   | 14  |      | dB   | 45 MHz to 100 MHz                                      |
|                                                                              | 15                   | 17  |      | dB   | 100 MHz to 400 MHz                                     |
|                                                                              | 14                   | 16  |      | dB   | 400 MHz to 700 MHz                                     |
|                                                                              | 12                   | 16  |      | dB   | 700 MHz to 1000 MHz                                    |
|                                                                              | 11                   | 14  |      | dB   | 1000 MHz to 1218 MHz                                   |
| Amplitude Balance                                                            |                      | 0.3 | 0.5  | dB   | 45 MHz to 200 MHz                                      |
|                                                                              |                      | 0.4 | 1.0  | dB   | 200 MHz to 600 MHz                                     |
|                                                                              |                      | 0.4 | 1.0  | dB   | 600 MHz to 1000 MHz                                    |
|                                                                              |                      | 0.4 | 1.0  | dB   | 1000 MHz to 1218 MHz                                   |
| Phase Balance                                                                |                      | 2   | 3    | °    | 45 MHz, Nominal Phase Difference is 180°               |
|                                                                              |                      | 5   | 10   | °    | 45 MHz to 300 MHz, Nominal Phase Difference is 180°    |
|                                                                              |                      | 13  | 18   | °    | 300 MHz to 600 MHz, Nominal Phase Difference is 180°   |
|                                                                              |                      | 20  | 26   | °    | 600 MHz to 1000 MHz, Nominal Phase Difference is 180°  |
|                                                                              |                      | 21  | 26   | °    | 1000 MHz to 1218 MHz, Nominal Phase Difference is 180° |
| DC Current Capability (in CT)                                                |                      |     | 500  | mA   |                                                        |
| Impedance Ratio                                                              | 1:2.78               |     |      |      |                                                        |
| Type – Transmission Line                                                     | Balanced to Balanced |     |      |      |                                                        |

Typical Performance: T=25°C unless otherwise noted





RFXF0008



## Contact Information

For the latest specifications, additional product information, worldwide sales and distribution locations:

**Web:** [www.rfmd.com](http://www.rfmd.com)

**Tel:** 1-844-890-8163

**Email:** [customer.support@qorvo.com](mailto:customer.support@qorvo.com)

For information about the merger of RFMD and TriQuint as Qorvo:

**Web:** [www.qorvo.com](http://www.qorvo.com)

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