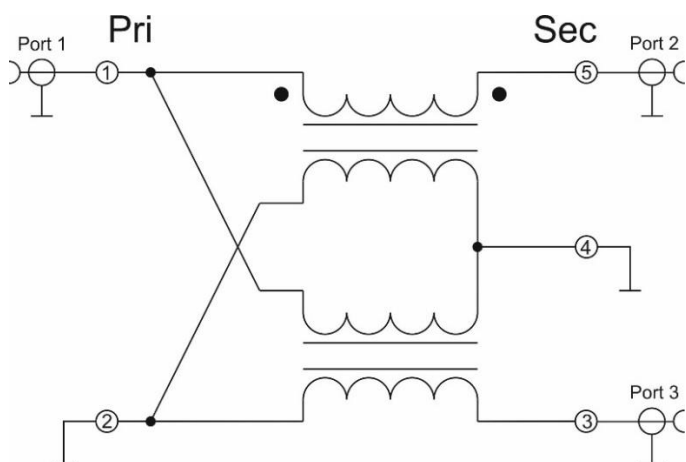


### Product Description

The RFXF0008H 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: SP6

### Product 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

| Part No.      | Description                   |
|---------------|-------------------------------|
| RFXF0008HSB   | Sample bag with 5 pcs         |
| RFXF0008HSQ   | Sample bag with 25 pcs        |
| RFXF0008HSR   | 13" Sample reel with 100 pcs  |
| RFXF0008HTR13 | 13" Sample reel with 1000 pcs |
|               |                               |
|               |                               |

## RFXF0008H Absolute Maximum Ratings

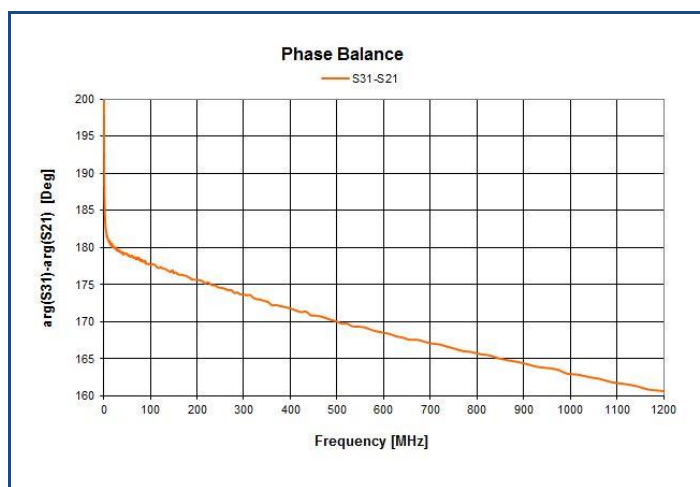
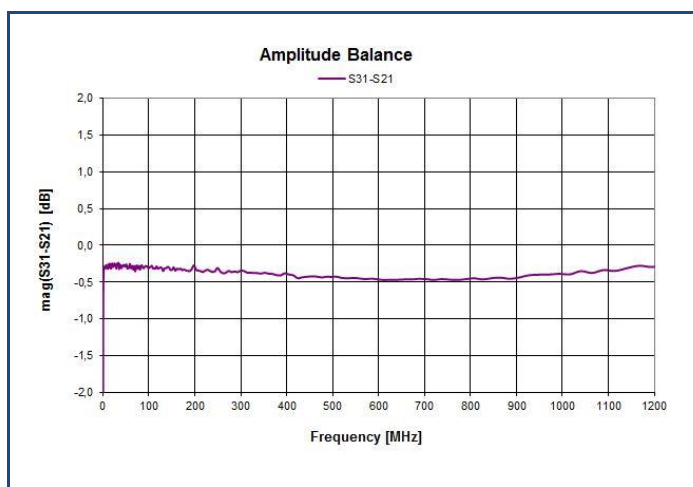
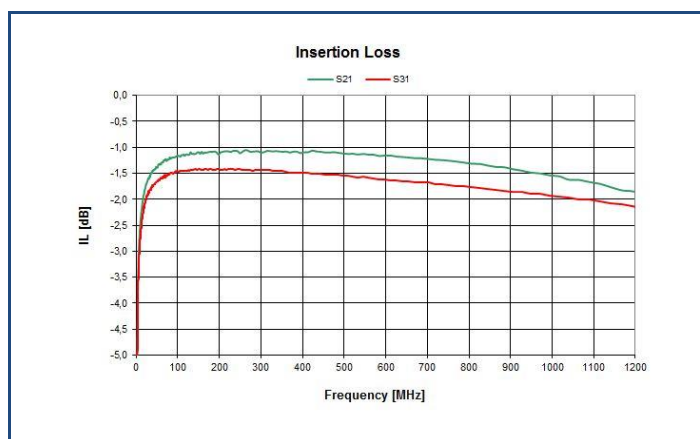
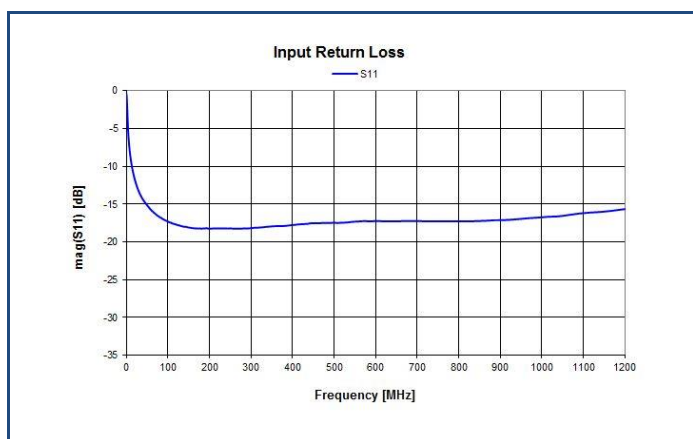
| Parameter                   | Value / Range |
|-----------------------------|---------------|
| RF Power                    | 2 W           |
| Storage Temperature Range   | -55 to 100 °C |
| Operating Temperature Range | -40 to 100 °C |

Operation of this device outside the parameter ranges given above may cause permanent damage.

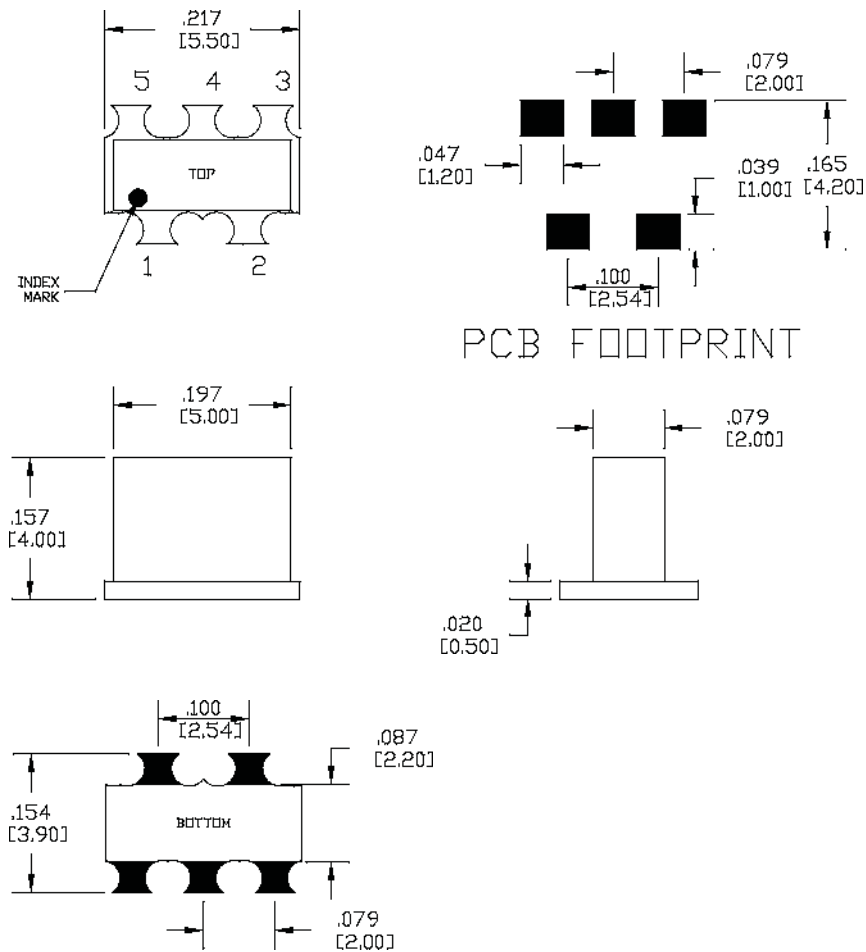
## Nominal Operating Parameters

| Parameter                                                                    | Test Conditions: T <sub>MB</sub> =25°C                              | Min                  | Typ | Max  | Unit |
|------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------|-----|------|------|
| General Performance. Typical values represent Mid Band performance at T=25°C |                                                                     |                      |     |      |      |
| Operational Frequency Range                                                  | –                                                                   | 40                   | –   | 1218 | MHz  |
| Insertion Loss                                                               | f <sub>0</sub> = 45 to 200 MHz                                      |                      | 1.6 | 2.0  | dB   |
|                                                                              | f <sub>0</sub> = 200 to 600 MHz                                     |                      | 1.5 | 2.0  |      |
|                                                                              | f <sub>0</sub> = 600 to 1000 MHz                                    |                      | 1.9 | 2.5  |      |
|                                                                              | f <sub>0</sub> = 1000 to 1218 MHz                                   |                      | 2.2 | 2.8  |      |
| Input Return Loss                                                            | f <sub>0</sub> = 45 MHz                                             | 12                   | 14  |      | dB   |
|                                                                              | f <sub>0</sub> = 45 to 100 MHz                                      | 12                   | 14  |      | dB   |
|                                                                              | f <sub>0</sub> = 100 to 400 MHz                                     | 15                   | 17  |      | dB   |
|                                                                              | f <sub>0</sub> = 400 to 700 MHz                                     | 14                   | 16  |      | dB   |
|                                                                              | f <sub>0</sub> = 700 to 1000 MHz                                    | 12                   | 16  |      | dB   |
|                                                                              | f <sub>0</sub> = 1000 to 1218 MHz                                   | 11                   | 14  |      | dB   |
| Amplitude Balance                                                            | f <sub>0</sub> = 45 to 200 MHz                                      |                      | 0.3 | 0.5  | dB   |
|                                                                              | f <sub>0</sub> = 200 to 600 MHz                                     |                      | 0.4 | 1.0  | dB   |
|                                                                              | f <sub>0</sub> = 600 to 1000 MHz                                    |                      | 0.4 | 1.0  | dB   |
|                                                                              | f <sub>0</sub> = 1000 to 1218 MHz                                   |                      | 0.4 | 1.0  | dB   |
| Phase Balance                                                                | f <sub>0</sub> = 45 MHz, Nominal Phase Difference is 180°           |                      | 2   | 3    | °    |
|                                                                              | f <sub>0</sub> = 45 to 300 MHz, Nominal Phase Difference is 180°    |                      | 5   | 10   | °    |
|                                                                              | f <sub>0</sub> = 300 to 600 MHz, Nominal Phase Difference is 180°   |                      | 13  | 18   | °    |
|                                                                              | f <sub>0</sub> = 600 to 1000 MHz, Nominal Phase Difference is 180°  |                      | 20  | 26   | °    |
|                                                                              | f <sub>0</sub> = 1000 to 1218 MHz, Nominal Phase Difference is 180° |                      | 21  | 26   | °    |
| 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



## Package Outline, Pin Out and Branding Drawing (Dimensions in inches [mm])



## Handling Precautions

| Parameter                    | Rating | Standard     |
|------------------------------|--------|--------------|
| ESD – Human Body Model (HBM) | N.A.   | MIL-STD-1686 |



## RoHS Compliance

This part is compliant with 2011/65/EU RoHS directive (Restrictions on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment) as amended by Directive 2015/863/EU.

## Contact Information

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

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

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