

Package: S-20C

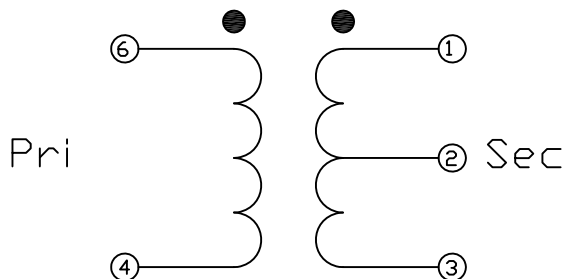


## Features

- Frequency Range 5MHz to 200MHz
- Low Cost and RoHS Compliant
- Industry Standard SMT package
- Available in Tape-and-Reel
- 75Ω Characteristic Impedance

## Applications

- Broadband/CATV
- Wireless



Functional Block Diagram

## Product Description

The RFXF0013 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.

## Ordering Information

|              |                                 |
|--------------|---------------------------------|
| RFXF0013SQ   | Sample bag with 25 pieces       |
| RFXF0013SR   | 13" Sample reel with 100 pieces |
| RFXF0013TR13 | 13" Reel with 1000 pieces       |

## Optimum Technology Matching® Applied

- |                                      |                                      |                                     |                                    |
|--------------------------------------|--------------------------------------|-------------------------------------|------------------------------------|
| <input type="checkbox"/> GaAs HBT    | <input type="checkbox"/> SiGe BiCMOS | <input type="checkbox"/> GaAs pHEMT | <input type="checkbox"/> GaN HEMT  |
| <input type="checkbox"/> GaAs MESFET | <input type="checkbox"/> Si BiCMOS   | <input type="checkbox"/> Si CMOS    | <input type="checkbox"/> BiFET HBT |
| <input type="checkbox"/> InGaP HBT   | <input type="checkbox"/> SiGe HBT    | <input type="checkbox"/> Si BJT     |                                    |

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## Absolute Maximum Ratings

| Parameter             | Rating      | Unit |
|-----------------------|-------------|------|
| RF Power              | 2           | W    |
| Operating Temperature | -45 to +85  | °C   |
| Storage Temperature   | -55 to +100 | °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 performance or functional operation of the device under Absolute Maximum Rating conditions is not implied.

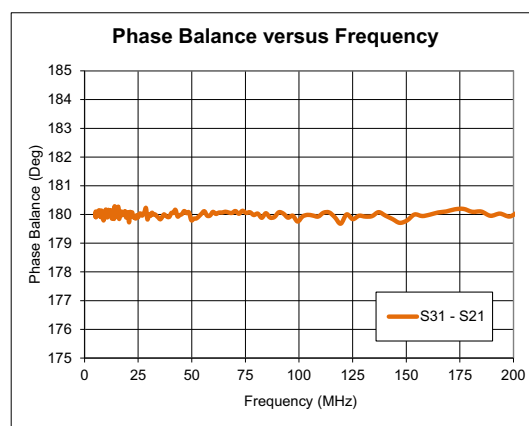
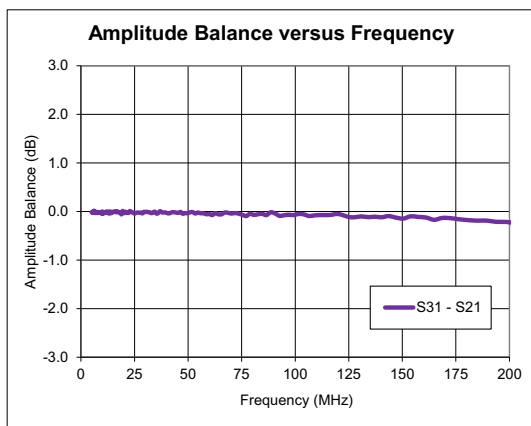
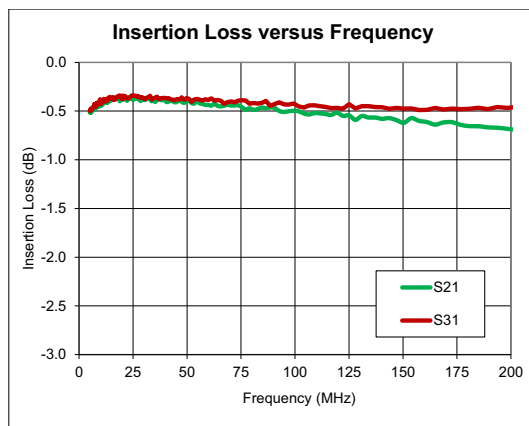
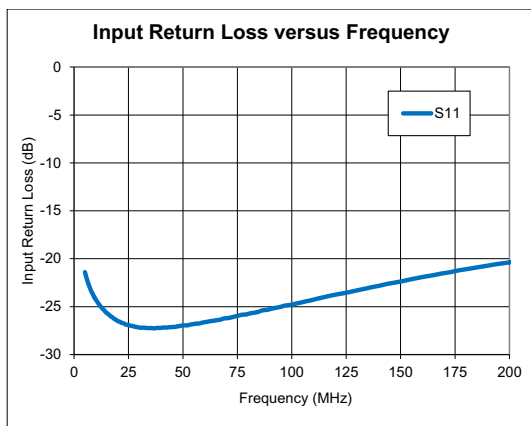
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RoHS (Restriction of Hazardous Substances): Compliant per EU Directive 2002/95/EC.

| Parameter            | Specification         |      |      | Unit | Condition  |
|----------------------|-----------------------|------|------|------|--|
|                      | Min.                  | Typ. | Max. |      |  |
| <b>Overall</b>       |                       |      |      |      | Typical values represent Mid-Band performance at 25 °C |
| Frequency Range      | 5                     |      | 200  | MHz  |  |
| Insertion Loss       |                       | 0.5  | 0.8  | dB   |  |
| Amplitude Balance    |                       | 0.2  | 0.5  | dB   |  |
| Phase Balance        |                       | 2    | 5    | Deg  | Nominal Phase Difference is 180 °                      |
| Input Return Loss    | 15                    | 22   |      | dB   |  |
| Impedance Ratio, P:S | 1:1                   |      |      |      |  |
| Type - Flux Coupled  | Unbalance to Balanced |      |      |      |  |

## Typical Data

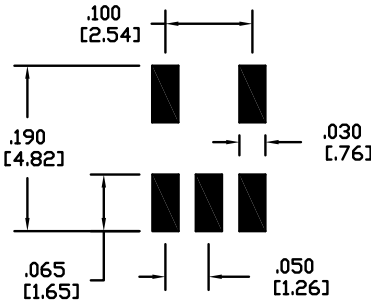
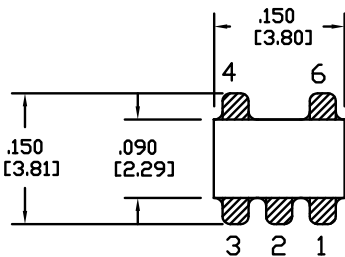


Pin Names and Descriptions

| Pin | Name          | Description     |
|-----|---------------|-----------------|
| 1   | SECONDARY DOT | Output (Port 2) |
| 2   | SECONDARY CT  | Ground          |
| 3   | SECONDARY     | Output (Port 3) |
| 4   | PRIMARY       | Ground          |
| 6   | PRIMARY DOT   | Input (Port 1)  |

Package Drawing - S20C

Dimensions in inches (millimeters)



PCB FOOTPRINT

