

RoHS Compliant and Pb-Free Product
Package: S06

Features

- Frequency Range 5 – 500 MHz
- Nominal Coupling 10 dB
- Low Cost and RoHS Compliant
- Industry Standard SMT package
- Available in Tape-and -Reel
- 50 Ω Characteristic Impedance

Product Description

The CPA-0501-510H coupler is designed for applications that require small, low cost, and highly reliable surface mount components. Applications may be found in broadband, wire-less and other communications systems. These units are built Lead-Free and RoHS compliant. S-Parameters are available on request.

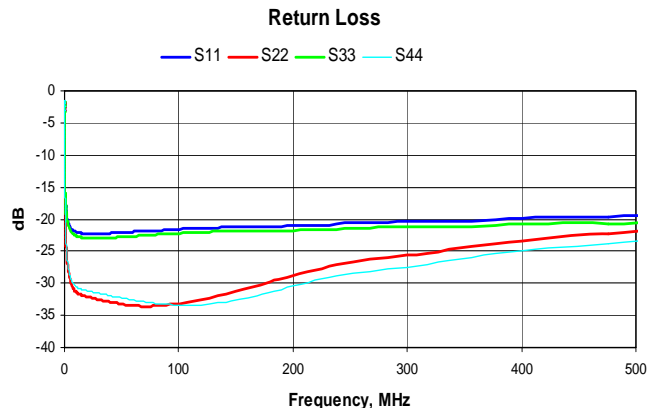
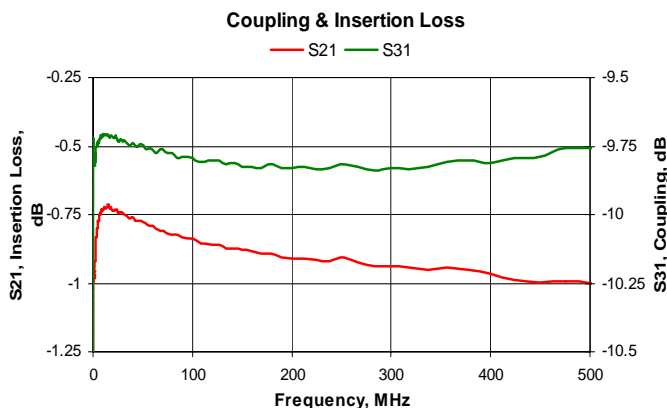
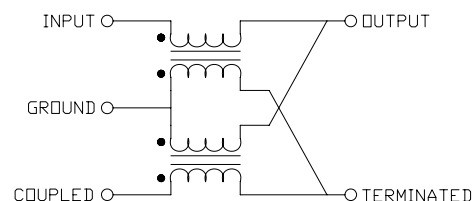


Specifications

| Parameter | Specification | | | Unit |
|-------------------|---------------|------|------|------|
| | Min. | Typ. | Max. | |
| Frequency Range | 5 | | 500 | MHz |
| Nominal Coupling | 9.5 | 10 | 10.5 | dB |
| Coupling Flatness | -0.5 | | +0.5 | dB |
| Mainline Loss | | 0.8 | 1.1 | dB |
| Directivity | 15 | 30 | | dB |
| Return Loss | 15 | 23 | | dB |

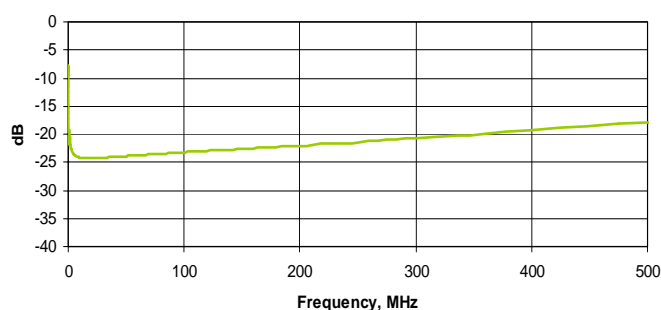
Note: Typical values represent midband performance at T=25 °C.

Schematic



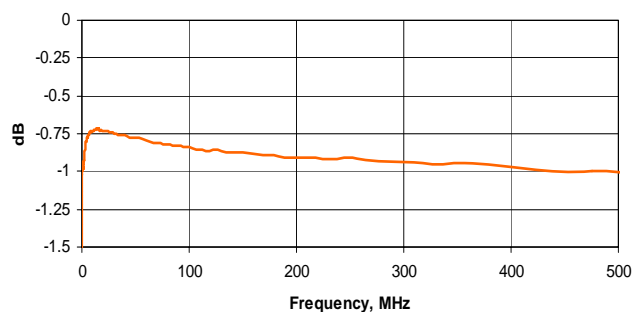
Directivity

S32-S31



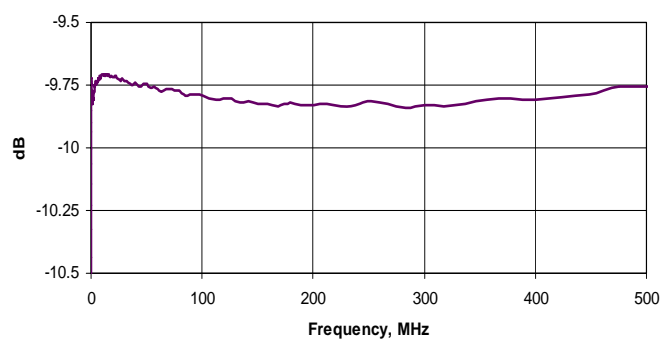
Insertion Loss

S21



Forward Coupling

S31



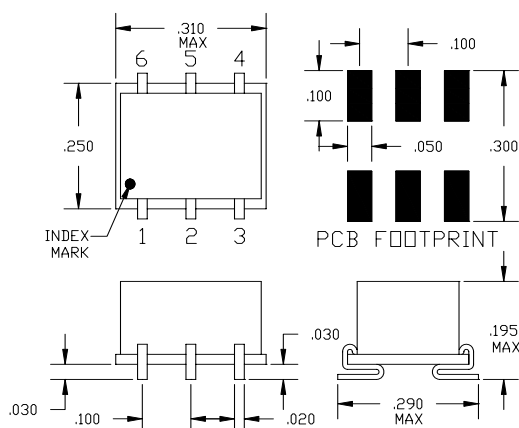
Pin Out

| Pin | Name |
|-----|------------|
| 1 | Input |
| 2 | Ground |
| 3 | Coupled |
| 4 | Terminated |
| 5 | Ground |
| 6 | Output |

Absolute Maximum Ratings

| Parameter | Rating | Unit |
|-----------------------|-------------|------|
| RF Power | +33 | dBm |
| Operating Temperature | -55 to +100 | °C |
| Storage Temperature | -55 to +100 | °C |

Package Drawing - S06



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.

RoHS status based on EUDirective2002/95/EC (at time of this document revision).

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