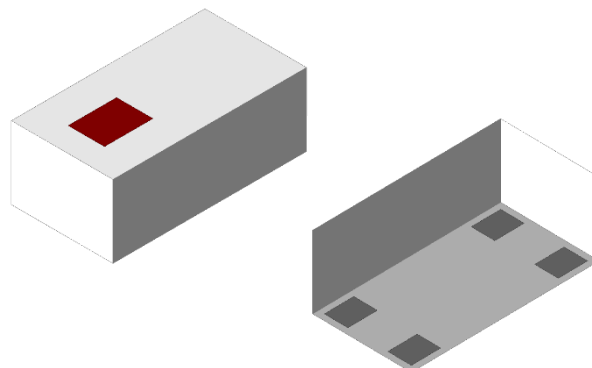


## 898 MHz Directional RF Coupler

- 865 – 928 MHz passband
- For wireless applications, such as DECT/PACS/PHS/GSM/DCS phones, WLAN card, Bluetooth modules, and more
- SMD, EIA 0603
- RoHS compliant



### General Specifications<sup>1 2</sup>

Passband Frequency (MHz)	880 - 915	865 - 928
Insertion Loss (dB)		0.35 Max.
Return Loss (dB)		18 Min.
Coupling	17 ± 1.0	17 ± 1.2
Isolation (dB)		30 Min.

### Maximum Ratings

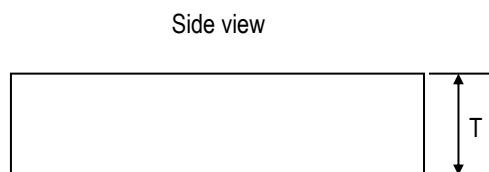
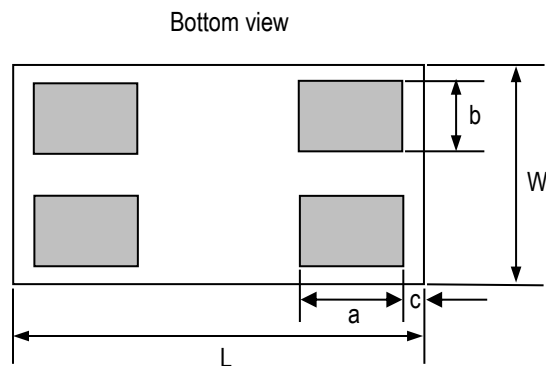
Power Capacity (W)	2 Max. (CW)
Operating Temperature (°C)	-40 to +85
Recommended Storage Conditions post-installation (°C)	-40 to +85
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

<sup>1</sup> Typical value represents average measurement at 25°C. Min./Max. values represent measurements over specified operating temperature.

<sup>2</sup> General specifications measured on Johanson's evaluation board P/N 0898CP14C0035001CE1.

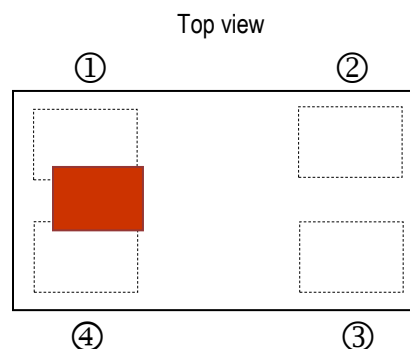
**Mechanical Dimensions**

	Inches			Millimeters		
<b>L</b>	0.063	±	0.004	1.60	±	0.10
<b>W</b>	0.033	±	0.004	0.84	±	0.10
<b>T</b>	0.024	±	0.004	0.60	±	0.10
<b>a</b>	0.010	±	0.002	0.25	±	0.05
<b>b</b>	0.008	±	0.002	0.20	±	0.05
<b>c</b>	0.002	±	0.002	0.05	±	0.05



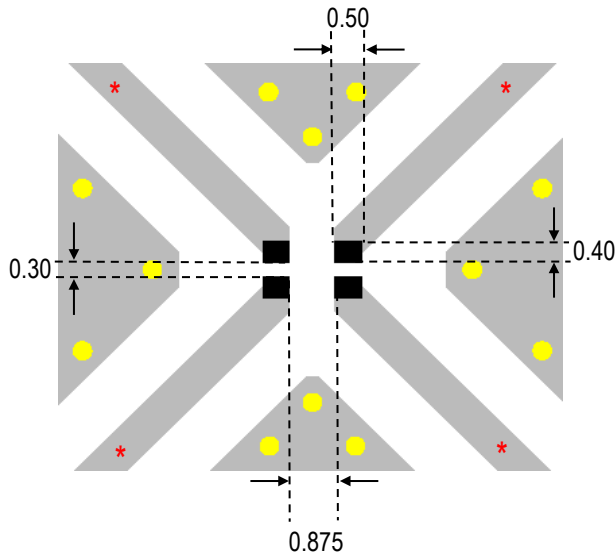
**Terminal Configuration<sup>3</sup>**

Pin Number	Function
1	In
2	Main Out
3	Termination
4	Coupled Out




<sup>3</sup> The termination type is Nickel Tin. Go to: <https://www.johansontechnology.com/ipcsoldering-profile> for Typical Soldering Profile.


**Recommended PCB Layout**



Units in mm

 Solder Resist

 Land

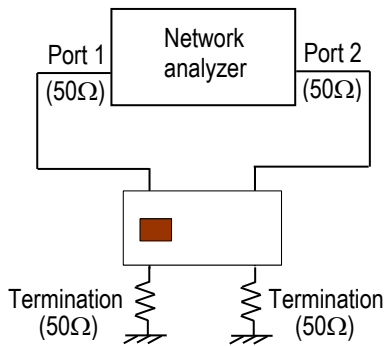
 Through-hole ( $\phi 0.3$ )

\* Transmission line width should be designed to match 50 $\Omega$  characteristic impedance, depending on PCB material and thickness.

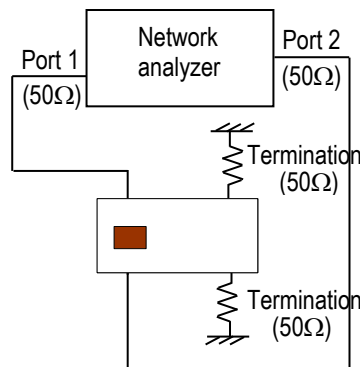
If you would like the CAD PCB layout or have any technical questions, please contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

**Measuring Diagram**

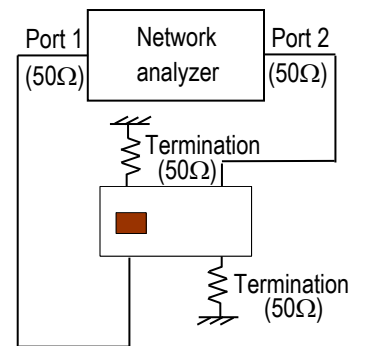
**Insertion Loss and Return Loss**



**Coupling**

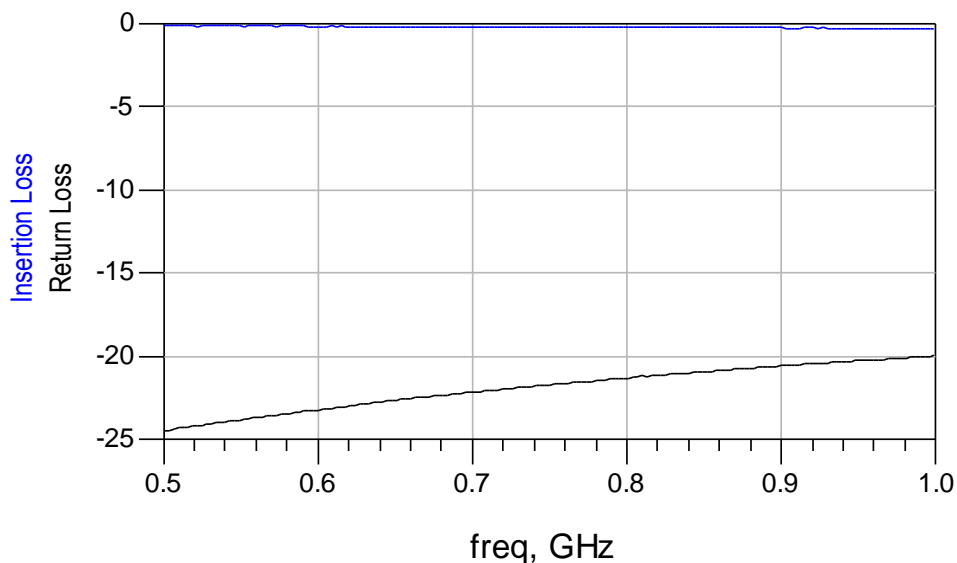


**Isolation**

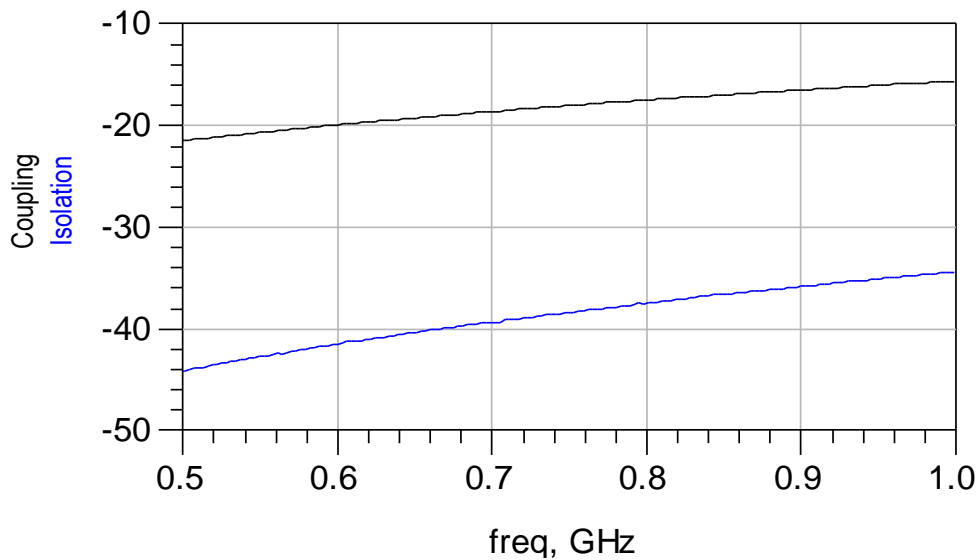


**RF Measurements (T = 25°C)**

**Insertion Loss and Return Loss**



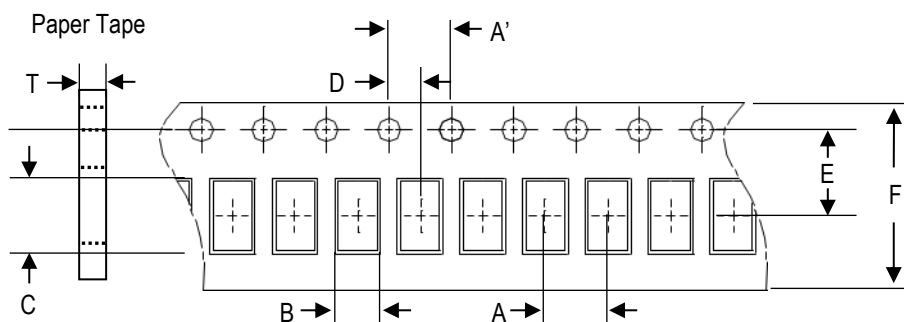
**Coupling and Isolation**



S-parameter and layout file available upon request. Please contact us at <https://www.johansontechnology.com/ask-a-question>

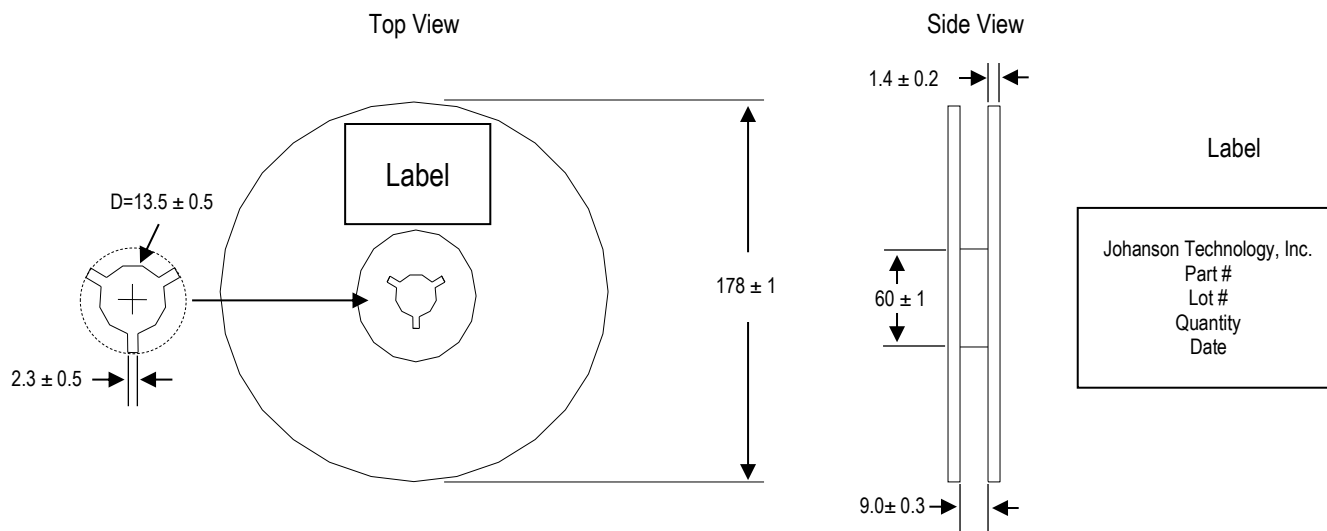
**Tape and Reel Specification (Units in mm)**

**Tape Dimensions**

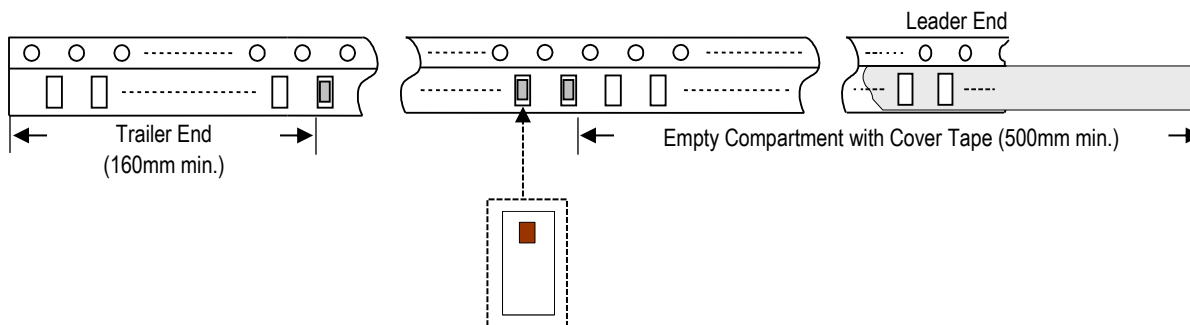


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0±0.1	4.0±0.1	1.1±0.1	1.92±0.1	2.0±0.1	3.5±0.1	8.0±0.1	0.75±0.05	4,000pcs.	Paper

**Reel Dimensions**



**Leader and Trailer Dimensions**



**Orderable Part Numbers**

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	0898CP14C0035001B	Nickel Tin
T & R (7" Reel Paper Tape)	0898CP14C0035001T (Qty: 4,000 pcs/reel)	
Evaluation Board with 4 SMA Connector	0898CP14C0035001CE1	

**Important Links**

[0898CP14C0035001T Product Page](#)

[More RF Couplers](#)

[Soldering Information](#)

[MSL Information](#)

[Packaging Information](#)

[Recommended Storage Condition and Max Shelf Life](#)

[RoHS Compliance](#)

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