

# PRELIMINARY

## 870/1810 MHz Dual Band Directional Coupler

**P/N 0869CD14A1810**

Detail Specification: 04/28/06

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### General Specifications

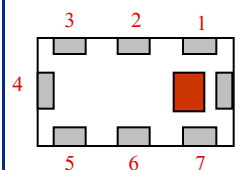
<b>Part Number</b>	0869CD14A1810	
	<b>Band 1</b>	<b>Band 2</b>
<b>Frequency (MHz)</b>	824 - 915	1710 - 1910
<b>Insertion Loss @ BW</b>	0.40 dB max.	0.40 dB max.
<b>Coupling</b>	19.5 ± 1.0 dB	19.5 ± 1.0 dB
<b>VSWR</b>	1.5 dB max.	1.5 dB max.
<b>Isolation</b>	Band 1(IN) --> Terminated	30.0 dB min.
	Band 2(IN) --> Terminated	30.0 dB min.

<b>Power Capacity Band 1</b>	x Watts max.
<b>Power Capacity Band 2</b>	x Watts max.
<b>Impedance</b>	50 Ω
<b>Operating &amp; Storage Temp.</b>	-40 to +85°C
<b>Reel Quantity</b>	4,000

<b>P/N</b>	<b>Packaging Style</b>	Bulk	Suffix = S	Eg. 0869CD14A1810S
		T & R	Suffix = E	Eg. 0869CD14A1810E
<b>Suffix</b>	<b>Termination Style</b>	100% Tin	Suffix = None	Eg. 0869CD14A1810(E or S)
		Tin / Lead	Please Contact Factory	

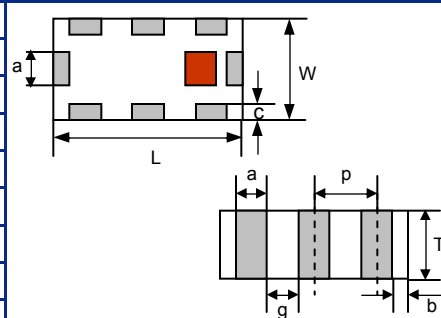
### Terminal Configuration

No.	Function
1	Band 2 IN
2	GND
3	Band 2 OUT
4	Termination
5	Band 1 OUT
6	GND
7	Band 1 IN
8	Coupling OUT



### Mechanical Dimensions

	In	mm
<b>L</b>	0.063 ± 0.004	1.60 ± 0.10
<b>W</b>	0.031 ± 0.004	0.80 ± 0.10
<b>T</b>	0.016 ± 0.004	0.40 ± 0.10
<b>a</b>	0.008 ± 0.004	0.20 ± 0.10
<b>b</b>	0.008 +.004/-0.006	0.20 +0.1/-0.15
<b>c</b>	0.006 ± 0.004	0.15 ± 0.10
<b>g</b>	0.012 ± 0.004	0.30 ± 0.10
<b>p</b>	0.020 ± 0.002	0.50 ± 0.05



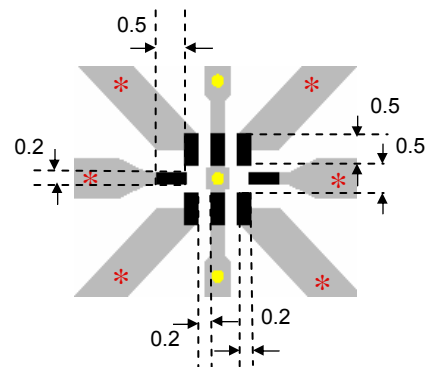
### Mounting Considerations

Mount these devices with brown mark facing up.

Line width should provide 50 Ω impedance matching characteristics.

Units: mm

- Solder Resist
- Land
- Through-hole (φ0.2)



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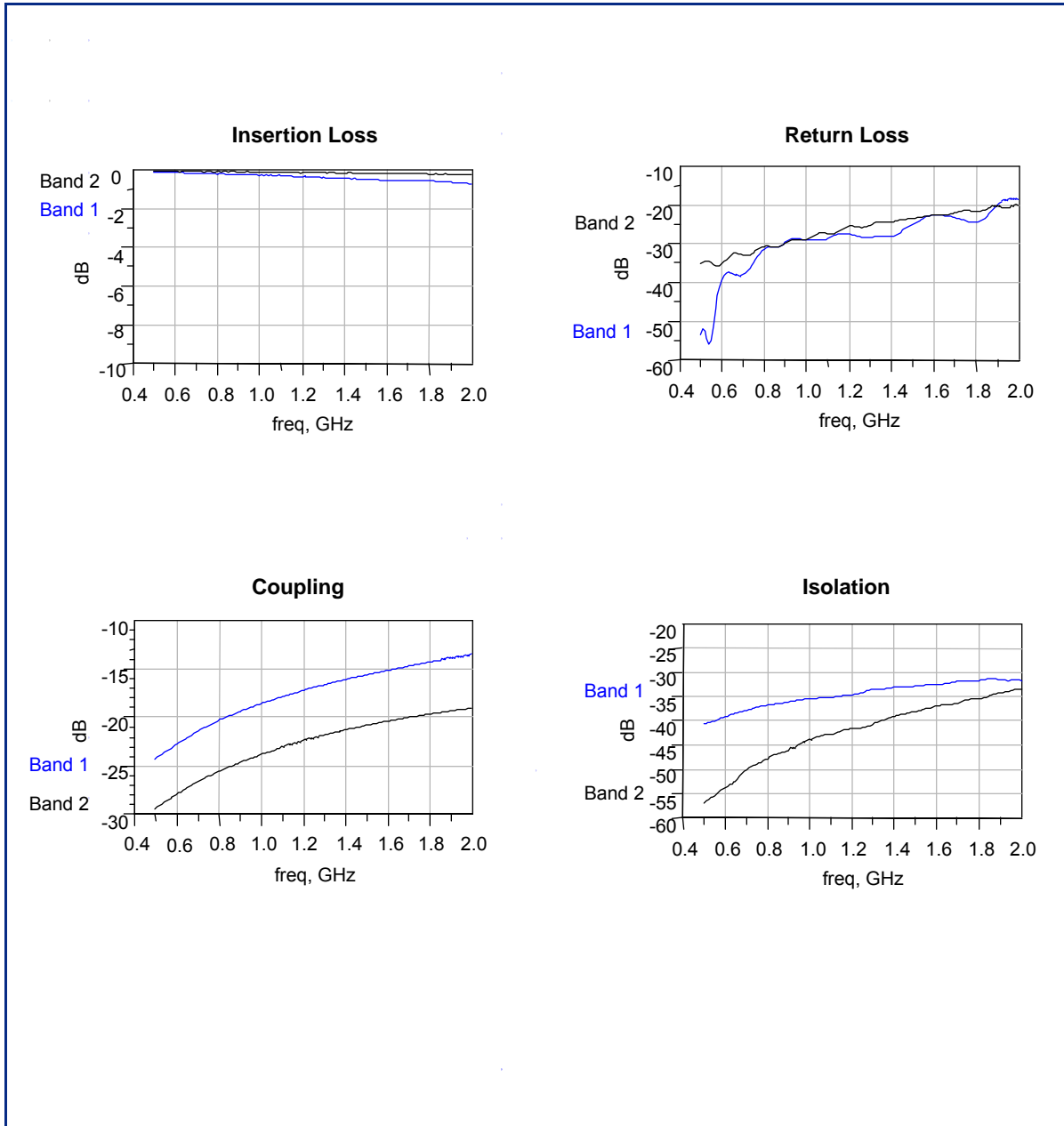
870/1810 MHz Dual Band Directional Coupler

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## Typical Electrical Characteristics (T=25°C)



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931 Via Alondra • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

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