

Thin-Film RF/Microwave Directional Couplers

CP0302/CP0402/CP0603/CP0805 and DB0603N/DB0805 3dB 90°

CP0402W2700FNTR Wide Band High Directivity



ITF TECHNOLOGY

The ITF High Directivity Wide Band LGA Coupler is based on thinfilm multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly.

The Wide Band High Directivity Coupler displays a stable coupling factor over a wide frequency band.

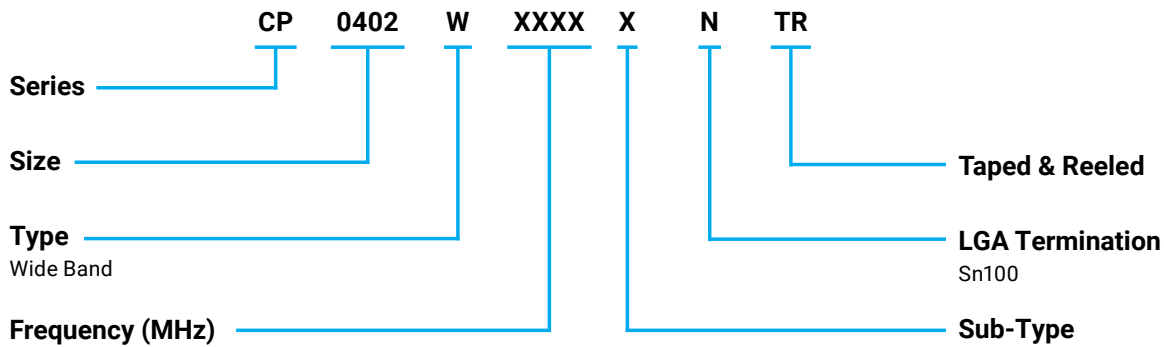
APPLICATIONS

- Mobile communications
- Satellite TV receivers
- GPS
- Vehicle location systems
- Wireless LAN's

LAND GRID ARRAY ADVANTAGES

- Inherent Low Profile
- Self Alignment during Reflow
- Excellent Solderability
- Low Parasitics
- Better Heat Dissipation

HOW TO ORDER



QUALITY INSPECTION

Finished parts are 100% tested for electrical parameters and visual characteristics. Each production lot is evaluated on a sample basis for:

- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance: 125°C, I_R, 4 hours

TERMINATION

Nickel/Lead Free solder coating compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

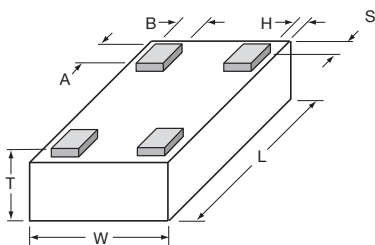
OPERATING TEMPERATURE

-40°C to +85°C

POWER RATING

3W RF Continuous

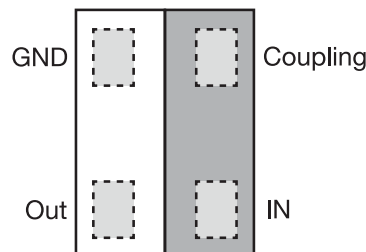
DIMENSIONS (BOTTOM VIEW)



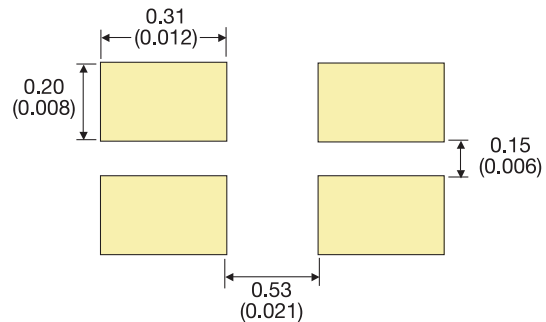
mm (inches)

L	1.00±0.05 (0.040±0.002)
W	0.58±0.04 (0.023±0.002)
T	0.35±0.05 (0.014±0.002)
A	0.20±0.05 (0.008±0.002)
B	0.18±0.05 (0.007±0.002)
S, H	0.05±0.05 (0.002±0.002)

TERMINALS (TOP VIEW)



Recommended Pad Layout Dimensions mm (inches)



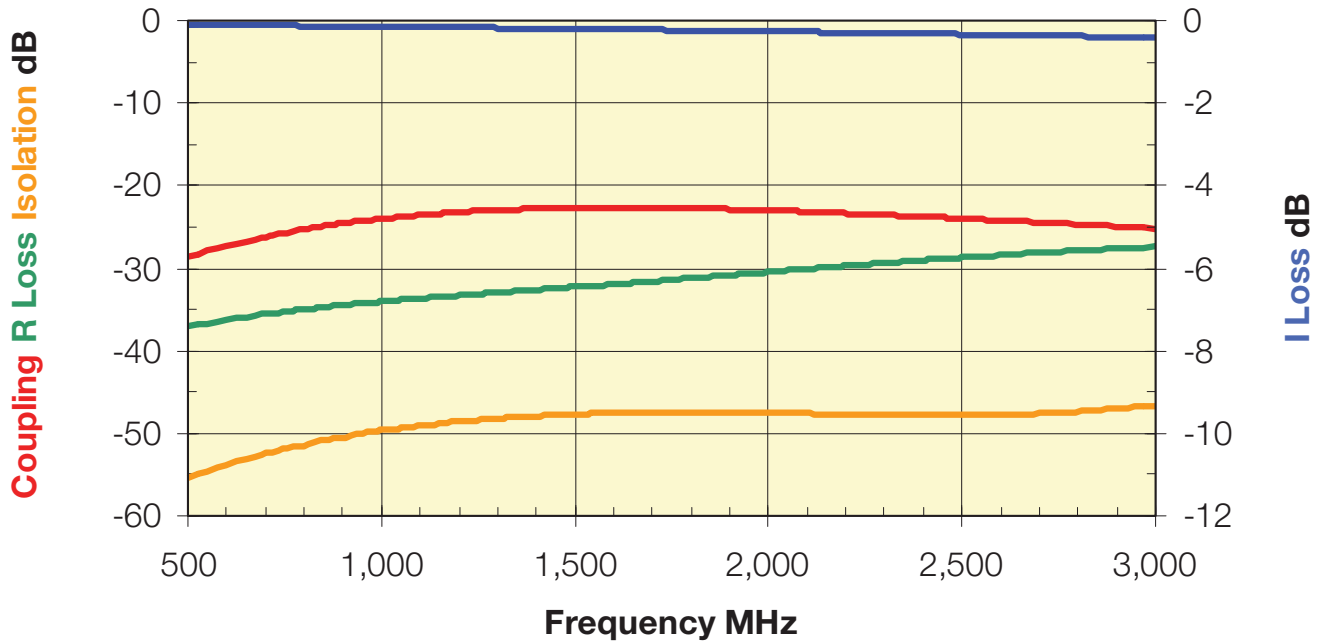
Thin-Film RF/Microwave Directional Couplers

CP0302/CP0402/CP0603/CP0805 and DB0603N/DB0805 3dB 90°
 CP0402W2700FNTR Wide Band High Directivity



Directional Coupler Type CP0402W2700FNTR

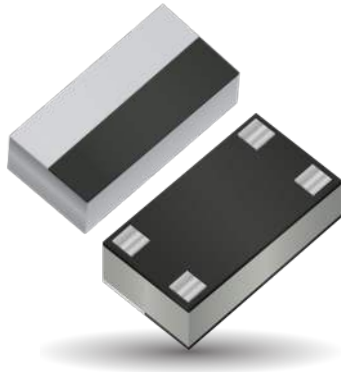
P/N	Frequency [MHz]	Coupling [dB]	I. Loss max. [dB]	Return Loss [dB]	Directivity [dB]
CP0402W2700FNTR	700-2,700	24±2	0.3	18	20



Broadband Directional Couplers

Lead-Free LGA Termination

CP0402W3800GNTR - High Directivity



ITF TECHNOLOGY

The ITF High Directivity LGA Coupler is based on thin-film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly.

The ITF Coupler is offered in a variety of frequency bands compatible with various types of high frequency wireless systems.

APPLICATIONS

- Mobile communications
- Satellite TV receivers
- GPS
- Vehicle location systems
- Wireless LAN's

LAND GRID ARRAY ADVANTAGES

- Inherent Low Profile
- Self Alignment during Reflow
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- Low Parasitics
- Better Heat Dissipation

HOW TO ORDER

CP Series
0402 Size
W Type
3800 Frequency (MHz)
G Sub-Type
N LGA Term Sn100
TR Taped & Reeled

FINAL QUALITY INSPECTION

Finished parts are 100% tested for electrical parameters and visual/mechanical characteristics. Each production lot is evaluated on a sample basis for:

- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance: 125°C, I_R, 4 hours

TERMINATION

Nickel/Lead-Free Solder coating (Sn100) compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

OPERATING TEMPERATURE

-40°C to +85°C

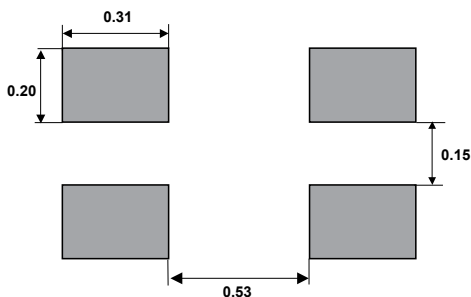
POWER RATING

1W RF Continuous

NOTE

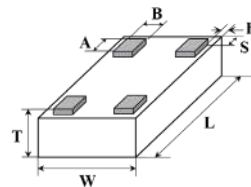
CP0402W3800GNTR includes a built in 50 Ohm resistor and does not require an external 50 Ohm resistor.

RECOMMENDED PAD LAYOUT: (mm)



DIMENSIONS: mm (inches)

(Bottom View)

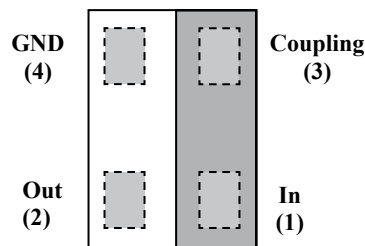


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TERMINALS:

(Top View)



Broadband Directional Couplers

Lead-Free LGA Termination

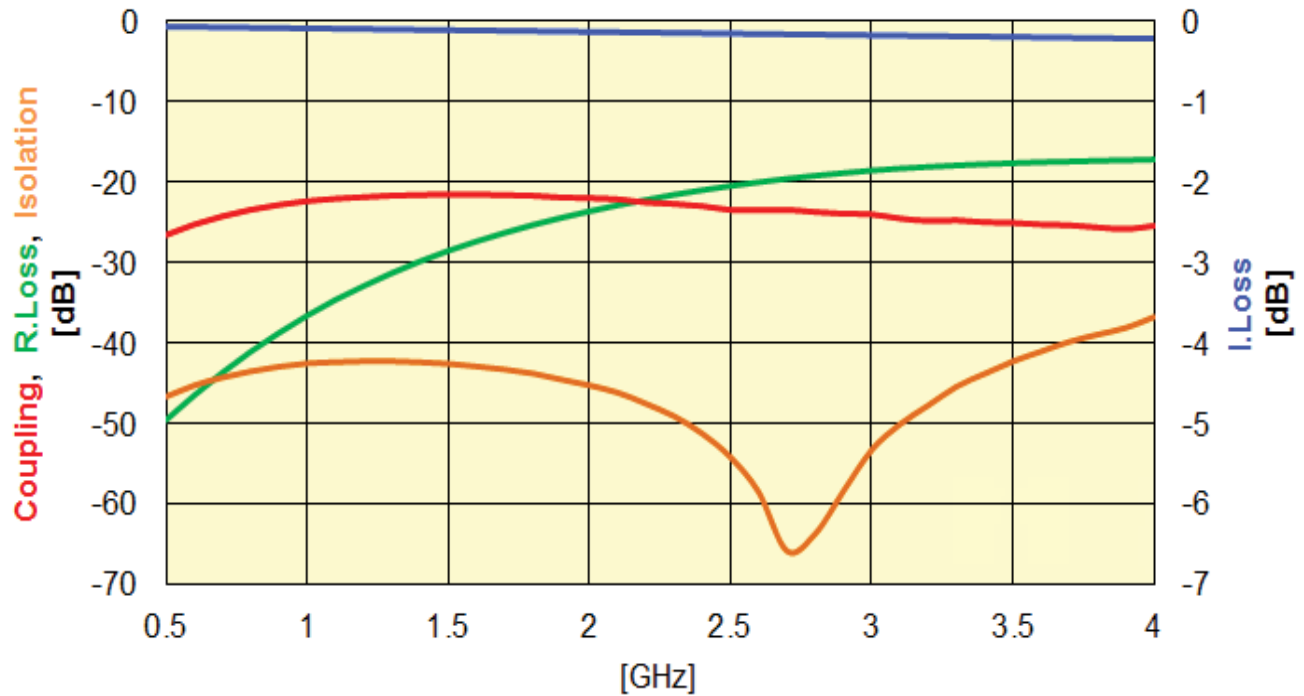
CP0402W3800GNTR - High Directivity



DIRECTIONAL COUPLER TYPE CP0402W3800GNTR

P/N	FREQUENCY [MHz]	COUPLING [dB]	I. Loss max. [dB]	R.Loss [dB]	Directivity [dB]
CP0402W3800GNTR	700-3800	24±2.5	0.4	18	18

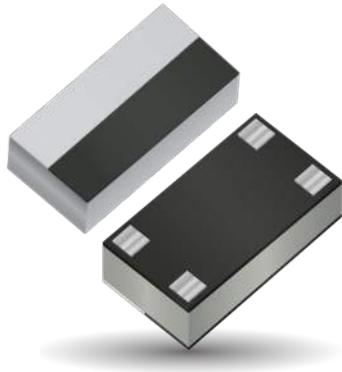
TYPICAL ELECTRICAL PERFORMANCE



Broadband Directional Couplers

Lead-Free LGA Termination

CP0402W4500JNTR - High Directivity



ITF TECHNOLOGY

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The ITF Coupler is offered in a variety of frequency bands compatible with various types of high frequency wireless systems.

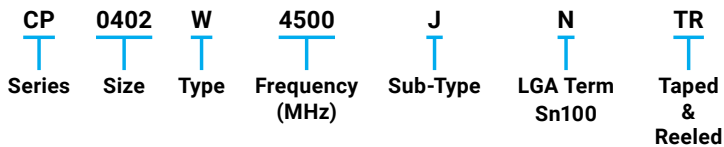
APPLICATIONS

- 5G Application
- Mobile communications
- Satellite TV receivers
- GPS
- Vehicle location systems

LAND GRID ARRAY ADVANTAGES

- Inherent Low Profile
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HOW TO ORDER



FINAL QUALITY INSPECTION

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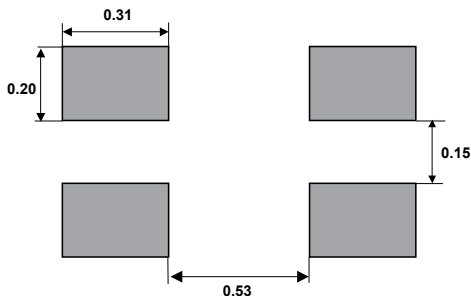
OPERATING TEMPERATURE

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POWER RATING

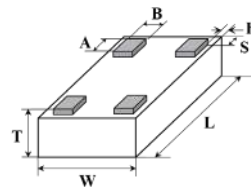
1W RF Continuous

RECOMMENDED PAD LAYOUT: (mm)



DIMENSIONS: mm (inches)

(Bottom View)

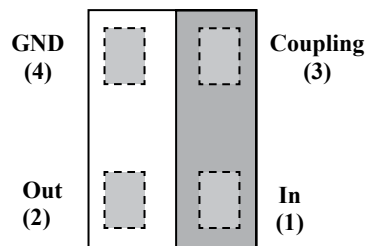


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TERMINALS:

(Top View)



Broadband Directional Couplers

Lead-Free LGA Termination

CP0402W4500JNTR - High Directivity



DIRECTIONAL COUPLER TYPE CP0402W3800GNTD

P/N	FREQUENCY [MHz]	COUPLING [dB]	I. Loss [dB]	R.Loss [dB]	Directivity [dB]
CP0402W4500JNTR	2000-7000	20±2	0.6	15	15

TYPICAL ELECTRICAL PERFORMANCE

