

Thin Film Directional Coupler



CP0402P High Directivity, Tight Coupling Tolerance

GENERAL DESCRIPTION

ITF (Integrated Thin-Film) TECHNOLOGY

The CP0402P Series High Directivity, Tight Coupling Tolerance LGA Coupler is based on the proprietary RFAP 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

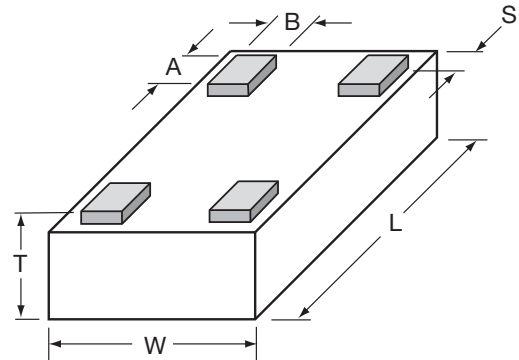
- Wireless communications
- Wireless LAN's
- GPS
- WiMAX

LAND GRID ARRAY ADVANTAGES

- Inherent Low Profile
- Self Alignment during Reflow
- Excellent Solderability
- Low Parasitics
- Better Heat Dissipation
- Power Rating 3W RF Continuous

DIMENSIONS: (Bottom View)

millimeters (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 | 0.05±0.05 (0.002±0.002) |

HOW TO ORDER

CP
T
Style

0402
T
Size
0402

P
T
Type
±0.5dB
Tight Tolerance

XXXX
T
Frequency
MHz

X
T
Sub-Type

N
T
Termination
LGA
Lead-Free

TR
T
Taped & Reeled

QUALITY INSPECTION

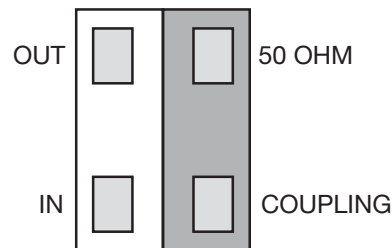
Finished parts are 100% tested for electrical parameters and visual characteristics. Each production lot is evaluated on a sample basis for:

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

TERMINATION

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

TERMINALS (Top View)

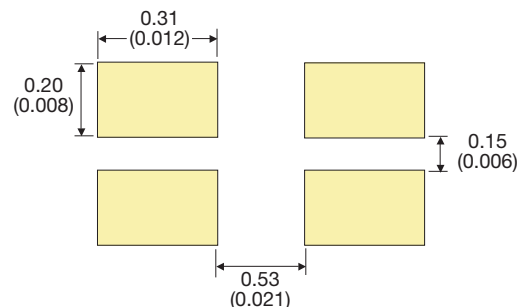


OPERATING TEMPERATURE:

-40°C to +85°C

Recommended Pad Layout Dimensions

mm (inches)



Thin Film Directional Coupler

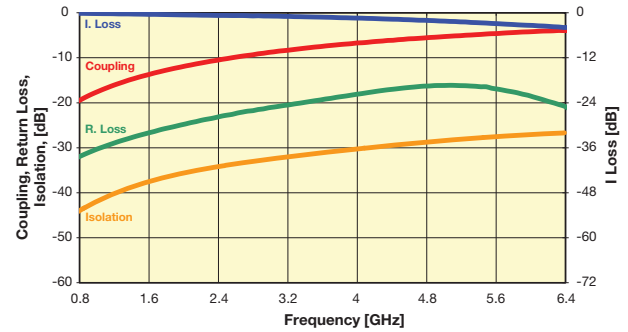
CP0402P High Directivity, Tight Coupling Tolerance



Coupler P/N CP0402PxxxxAN

| Application | P/N Examples* | Frequency Band [MHz] | Coupling [dB] | I. Loss max. [dB] | Return Loss [dB] | Directivity [dB] | |
|--------------|---------------|----------------------|---------------|-------------------|------------------|------------------|----|
| AMPS | CP0402P0836AN | 824 - 849 | 19.10±0.5 | 0.25 | 32 | 21 | |
| | CP0402P0881AN | 869 - 894 | 18.60±0.5 | 0.25 | 31 | | |
| GSM | CP0402P0902AN | 890 - 915 | 18.50±0.5 | 0.25 | 31 | | |
| | CP0402P0947AN | 935 - 960 | 18.00±0.5 | 0.25 | 31 | | |
| E-GSM | CP0402P0897AN | 880 - 915 | 18.50±0.5 | 0.25 | 31 | | |
| | CP0402P0942AN | 925 - 960 | 18.00±0.5 | 0.25 | 31 | | |
| PDC | CP0402P1441AN | 1429 - 1453 | 14.50±0.5 | 0.40 | 28 | | |
| PCN | CP0402P1747AN | 1710 - 1785 | 13.00±0.5 | 0.50 | 26 | | |
| | CP0402P1842AN | 1805 - 1880 | 12.50±0.5 | 0.50 | 26 | | |
| PCS | CP0402P1880AN | 1850 - 1910 | 12.30±0.5 | 0.50 | 25 | | |
| | CP0402P1960AN | 1930 - 1990 | 12.00±0.5 | 0.50 | 25 | | |
| PHP | CP0402P1907AN | 1895 - 1920 | 12.30±0.5 | 0.50 | 25 | | |
| DECT | CP0402P1890AN | 1880 - 1900 | 12.30±0.5 | 0.50 | 25 | | |
| Wireless LAN | CP0402P2442AN | 2400 - 2484 | 10.30±0.5 | 0.70 | 23 | | |
| WiFi | CP0402P3500AN | 3450 - 3550 | 7.60±0.5 | 1.30 | 15 | | 14 |
| | CP0402P5000AN | 4950 - 5050 | 5.00±0.5 | 1.50 | 15 | | 13 |
| | CP0402P5500AN | 5450 - 5550 | 4.60±0.5 | 1.50 | 14 | 13 | |
| | CP0402P6000AN | 5950 - 6050 | 4.00±0.5 | 1.50 | 14 | 13 | |

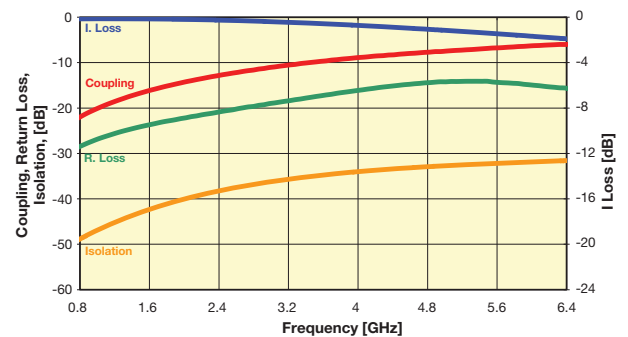
CP0402PxxxxANTR



Coupler P/N CP0402PxxxxBN

| Application | P/N Examples | Frequency Band [MHz] | Coupling [dB] | I. Loss max. [dB] | Return Loss [dB] | Directivity [dB] | |
|--------------|---------------|----------------------|---------------|-------------------|------------------|------------------|----|
| AMPS | CP0402P0836BN | 824 - 849 | 22.00±0.5 | 0.20 | 28 | 27 | |
| | CP0402P0881BN | 869 - 894 | 21.70±0.5 | 0.20 | 28 | | |
| GSM | CP0402P0902BN | 890 - 915 | 21.50±0.5 | 0.20 | 28 | | |
| | CP0402P0947BN | 935 - 960 | 21.00±0.5 | 0.25 | 27 | | |
| E-GSM | CP0402P0897BN | 880 - 915 | 21.50±0.5 | 0.20 | 28 | | |
| | CP0402P0942BN | 925 - 960 | 21.00±0.5 | 0.25 | 27 | | |
| PDC | CP0402P1441BN | 1429 - 1453 | 17.50±0.5 | 0.25 | 24 | | |
| PCN | CP0402P1747BN | 1710 - 1785 | 16.00±0.5 | 0.30 | 23 | | |
| | CP0402P1842BN | 1805 - 1880 | 15.50±0.5 | 0.35 | 23 | | |
| PCS | CP0402P1880BN | 1850 - 1910 | 15.50±0.5 | 0.35 | 23 | | |
| | CP0402P1960BN | 1930 - 1990 | 15.00±0.5 | 0.35 | 22 | | |
| PHP | CP0402P1907BN | 1895 - 1920 | 15.50±0.5 | 0.35 | 23 | | |
| DECT | CP0402P1890BN | 1880 - 1900 | 15.50±0.5 | 0.35 | 23 | | |
| Wireless LAN | CP0402P2442BN | 2400 - 2484 | 13.30±0.5 | 0.40 | 21 | | |
| WiFi | CP0402P3500BN | 3450 - 3550 | 9.40±0.5 | 0.80 | 18 | | 14 |
| | CP0402P5000BN | 4950 - 5050 | 7.40±0.5 | 1.20 | 14 | | 13 |
| | CP0402P5500BN | 5450 - 5550 | 6.70±0.5 | 1.60 | 14 | 13 | |
| | CP0402P6000BN | 5950 - 6050 | 6.10±0.5 | 2.00 | 14 | 13 | |

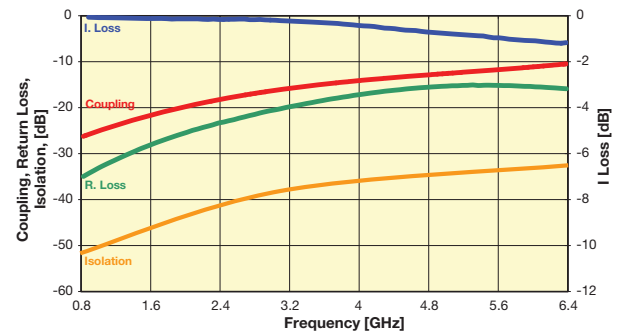
CP0402PxxxxBNTR



Coupler P/N CP0402PxxxxEN

| Application | P/N Examples | Frequency Band [MHz] | Coupling [dB] | I. Loss max. [dB] | Return Loss [dB] | Directivity [dB] | |
|--------------|---------------|----------------------|---------------|-------------------|------------------|------------------|----|
| AMPS | CP0402P0836EN | 824 - 849 | 27.20±0.5 | 0.20 | 35 | 25 | |
| | CP0402P0881EN | 869 - 894 | 26.80±0.5 | 0.20 | 34 | | |
| GSM | CP0402P0902EN | 890 - 915 | 26.50±0.5 | 0.20 | 34 | | |
| | CP0402P0947EN | 935 - 960 | 26.00±0.5 | 0.20 | 34 | | |
| E-GSM | CP0402P0897EN | 880 - 915 | 26.50±0.5 | 0.20 | 34 | | |
| | CP0402P0942EN | 925 - 960 | 26.00±0.5 | 0.20 | 34 | | |
| PDC | CP0402P1441EN | 1429 - 1453 | 22.30±0.5 | 0.25 | 29 | | |
| PCN | CP0402P1747EN | 1710 - 1785 | 20.50±0.5 | 0.25 | 27 | | |
| | CP0402P1842EN | 1805 - 1880 | 20.30±0.5 | 0.25 | 26 | | |
| PCS | CP0402P1880EN | 1850 - 1910 | 20.00±0.5 | 0.25 | 26 | | |
| | CP0402P1960EN | 1930 - 1990 | 20.00±0.5 | 0.25 | 26 | | |
| PHP | CP0402P1907EN | 1895 - 1920 | 20.00±0.5 | 0.25 | 26 | | |
| DECT | CP0402P1890EN | 1880 - 1900 | 20.00±0.5 | 0.25 | 26 | | |
| Wireless LAN | CP0402P2442EN | 2400 - 2484 | 18.00±0.5 | 0.35 | 23 | | |
| WiFi | CP0402P3500EN | 3450 - 3550 | 15.00±0.5 | 0.37 | 20 | | 16 |
| | CP0402P5000EN | 4950 - 5050 | 12.50±0.5 | 0.50 | 18 | | 13 |
| | CP0402P5500EN | 5450 - 5550 | 11.50±0.5 | 0.65 | 16 | 13 | |
| | CP0402P6000EN | 5950 - 6050 | 11.10±0.5 | 0.70 | 15 | 13 | |

CP0402PxxxxENTR





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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