

Thin-Film Directional Couplers

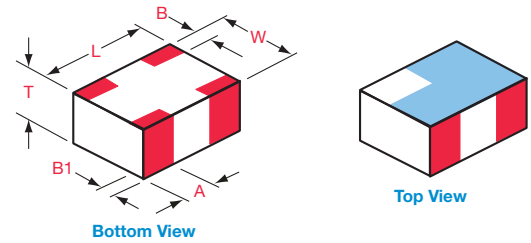


CP0603 SMD Type

GENERAL DESCRIPTION ITF (Integrated Thin-Film) TECHNOLOGY

The ITF SMD 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.

DIMENSIONS: millimeters (inches)



| | 0603 |
|----|-------------------------------------|
| L | 1.6±0.1 (0.063±0.004) |
| W | 0.84±0.1 (0.033±0.004) |
| T | 0.60±0.1 (0.028±0.004) |
| A | 0.35±0.15 (0.014±0.006) |
| B | 0.175±0.1 (0.007±0.004) |
| B1 | 0.00+0.1/0-0.0 (0.00+0.004/-0.0) |

APPLICATIONS

- Mobile Communications
- Satellite TV Receivers
- GPS
- Vehicle Location Systems
- Wireless LAN's

FEATURES

- Miniature Size: 0603
- Frequency Range: 800MHz - 3GHz
- Characteristic Impedance: 50Ω
- Operating / Storage Temp.: -40°C to +85°C
- Power Rating: 3W Continuous
- Low Profile
- Rugged Construction
- Taped and Reeled

HOW TO ORDER

| | | | | | | |
|--|--|-----------------------------|--|---------------------------------|--|--|
| CP Style Directional Coupler | 0603 Size 0603 | X Type | **** Frequency MHz | X Sub Type | S Termination Code W = Sn90, Pb10 **S = Sn100 | TR Packaging Code TR = Tape and Reel |
|--|--|-----------------------------|--|---------------------------------|--|--|

**RoHS compliant

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

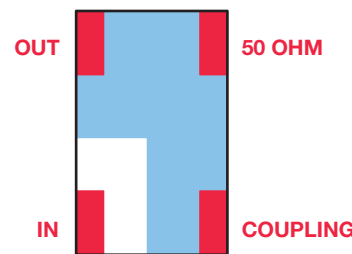
TERMINATION

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

Recommended Pad Layout Dimensions mm (inches)



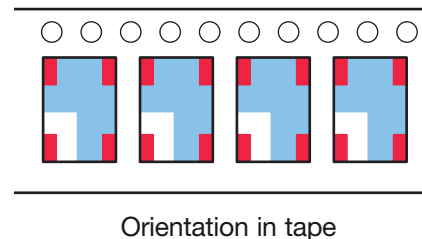
TERMINALS (Top View)



Not RoHS Compliant



For RoHS compliant products, please select correct termination style.



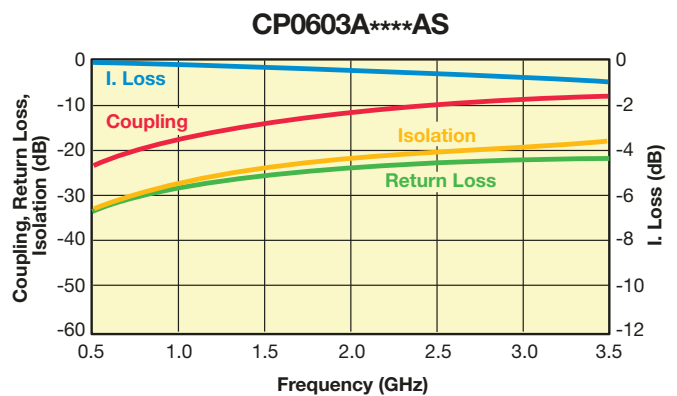
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CP0603 SMD Type

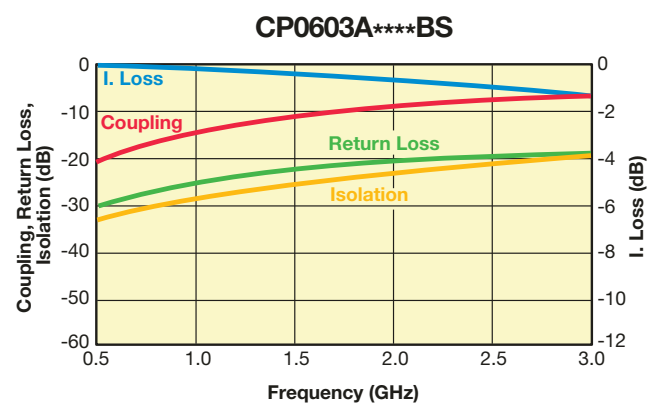
Coupler P/N CP0603A****AS

| Application | P/N Examples | Frequency Band [MHz] | Coupling [dB] | I. Loss max | VSWR max |
|--------------|---------------|----------------------|---------------|-------------|----------|
| AMPS | CP0603A0836AS | 824 - 849 | 18.5±1 | 0.25 | 1.2 |
| | CP0603A0881AS | 869 - 894 | 18.5±1 | | |
| GSM | CP0603A0902AS | 890 - 915 | 18±1 | 0.25 | |
| | CP0603A0947AS | 935 - 960 | 17.5±1 | | |
| E-GSM | CP0603A0897AS | 880 - 915 | 18±1 | 0.4 | |
| | CP0603A0942AS | 925 - 960 | 17.5±1 | | |
| PDC | CP0603A1441AS | 1429 - 1453 | 14±1 | 0.4 | |
| PCN | CP0603A1747AS | 1710 - 1785 | 12.5±1 | 0.6 | |
| | CP0603A1842AS | 1805 - 1880 | 12±1 | | |
| PCS | CP0603A1880AS | 1850 - 1910 | 12±1 | 0.65 | |
| | CP0603A1960AS | 1930 - 1990 | 11.5±1 | | |
| PHP | CP0603A1907AS | 1895 - 1920 | 12±1 | 0.6 | |
| DECT | CP0603A1890AS | 1880 - 1900 | 12±1 | 0.6 | |
| Wireless LAN | CP0603A2442AS | 2400 - 2484 | 10±1 | 0.85 | |



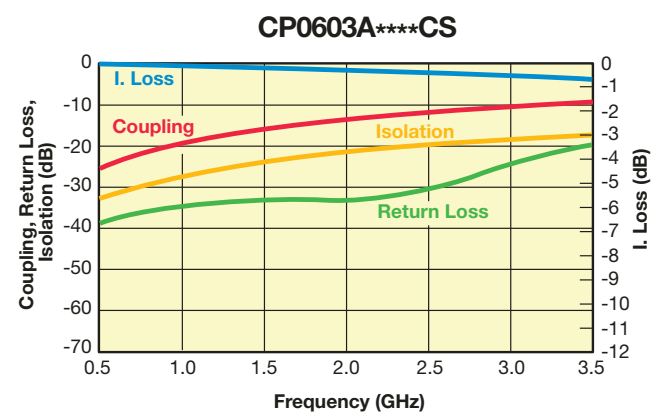
Coupler P/N CP0603A****BS

| Application | P/N Examples | Frequency Band [MHz] | Coupling [dB] | I. Loss max | VSWR max |
|--------------|---------------|----------------------|---------------|-------------|----------|
| AMPS | CP0603A0836BS | 824 - 849 | 16±1 | 0.25 | 1.2 |
| | CP0603A0881BS | 869 - 894 | 15.5±1 | | |
| GSM | CP0603A0902BS | 890 - 915 | 15.5±1 | 0.55 | |
| | CP0603A0947BS | 935 - 960 | 15±1 | | |
| E-GSM | CP0603A0897BS | 880 - 915 | 15.5±1 | 0.55 | |
| | CP0603A0942BS | 925 - 960 | 15±1 | | |
| PDC | CP0603A1441BS | 1429 - 1453 | 11.5±1 | 0.55 | |
| PCN | CP0603A1747BS | 1710 - 1785 | 10±1 | 0.8 | 1.3 |
| | CP0603A1842BS | 1805 - 1880 | 9.5±1 | | |
| PCS | CP0603A1880BS | 1850 - 1910 | 9±1 | 0.8 | |
| | CP0603A1960BS | 1930 - 1990 | 9±1 | | |
| PHP | CP0603A1907BS | 1895 - 1920 | 9±1 | 0.8 | |
| DECT | CP0603A1890BS | 1880 - 1900 | 9±1 | 0.8 | |
| Wireless LAN | CP0603A2442BS | 2400 - 2484 | 7.5±1 | 1.1 | |



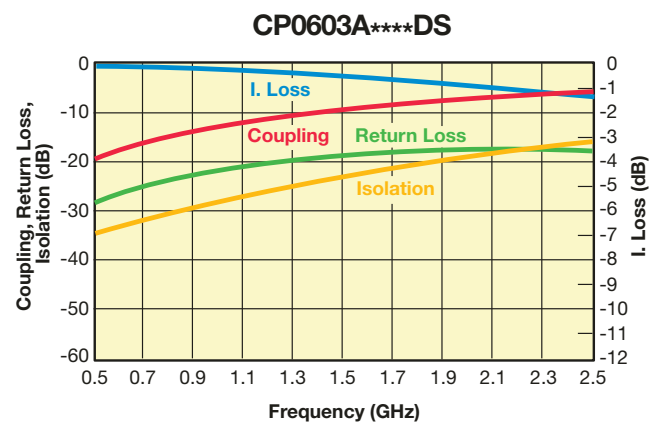
Coupler P/N CP0603A****CS

| Application | P/N Examples | Frequency Band [MHz] | Coupling [dB] | I. Loss max | VSWR max | |
|--------------|---------------|----------------------|---------------|-------------|----------|-----|
| AMPS | CP0603A0836CS | 824 - 849 | 21±1 | 0.25 | 1.2 | |
| | CP0603A0881CS | 869 - 894 | 20.5±1 | | | |
| GSM | CP0603A0902CS | 890 - 915 | 20.5±1 | 0.25 | | |
| | CP0603A0947CS | 935 - 960 | 20±1 | | | |
| E-GSM | CP0603A0897CS | 880 - 915 | 20.5±1 | 0.40 | | |
| | CP0603A0942CS | 925 - 960 | 20±1 | | | |
| PDC | CP0603A1441CS | 1429 - 1453 | 16.5±1 | 0.40 | | |
| PCN | CP0603A1747CS | 1710 - 1785 | 15±1 | 0.5 | | 1.2 |
| | CP0603A1842CS | 1805 - 1880 | 14.5±1 | | | |
| PCS | CP0603A1880CS | 1850 - 1910 | 14.5±1 | 0.5 | | |
| | CP0603A1960CS | 1930 - 1990 | 14±1 | | | |
| PHP | CP0603A1907CS | 1895 - 1920 | 14.5±1 | 0.5 | | |
| DECT | CP0603A1890CS | 1880 - 1900 | 14.5±1 | 0.5 | | |
| Wireless LAN | CP0603A2442CS | 2400 - 2484 | 12.5±1 | 0.65 | | |



Coupler P/N CP0603A****DS

| Application | P/N Examples | Frequency Band [MHz] | Coupling [dB] | I. Loss max | VSWR max |
|--------------|---------------|----------------------|---------------|-------------|----------|
| AMPS | CP0603A0836DS | 824 - 849 | 15.0±1 | 0.40 | 1.2 |
| | CP0603A0881DS | 869 - 894 | 14.5±1 | | |
| GSM | CP0603A0902DS | 890 - 915 | 14.5±1 | 0.40 | |
| | CP0603A0947DS | 935 - 960 | 14±1 | | |
| E-GSM | CP0603A0897DS | 880 - 915 | 14.5±1 | 0.7 | |
| | CP0603A0942DS | 925 - 960 | 14±1 | | |
| PDC | CP0603A1441DS | 1429 - 1453 | 10.5±1 | 0.7 | |
| PCN | CP0603A1747DS | 1710 - 1785 | 9±1 | 0.9 | 1.3 |
| | CP0603A1842DS | 1805 - 1880 | 8.5±1 | | |
| PCS | CP0603A1880DS | 1850 - 1910 | 8.5±1 | 1.0 | |
| | CP0603A1960DS | 1930 - 1990 | 8±1 | | |
| PHP | CP0603A1907DS | 1895 - 1920 | 8.5±1 | 1.0 | |
| DECT | CP0603A1890DS | 1880 - 1900 | 8.5±1 | 1.0 | |
| Wireless LAN | CP0603A2442DS | 2400 - 2484 | 6.5±1 | 1.5 | |



Important: Couplers can be used at any frequency within the indicated range.



Thin-Film Directional Couplers



CP0603 SMD Type

Coupler P/N CP0603B****AS

| Application | P/N Examples | Frequency Band [MHz] | Coupling [dB] | I. Loss max | VSWR max | |
|--------------|---------------|----------------------|---------------|-------------|----------|------|
| AMPS | CP0603B0836AS | 824 - 849 | 24.5±1 | 0.2 | 1.2 | |
| | CP0603B0881AS | 869 - 894 | 24±1 | | | |
| GSM | CP0603B0902AS | 890 - 915 | 24±1 | | | |
| | CP0603B0947AS | 935 - 960 | 23.5±1 | | | |
| E-GSM | CP0603B0897AS | 880 - 915 | 24±1 | | | |
| | CP0603B0942AS | 925 - 960 | 23.5±1 | | | |
| PDC | CP0603B1441AS | 1429 - 1453 | 20±1 | | | 0.25 |
| PCN | CP0603B1747AS | 1710 - 1785 | 18±1 | | | |
| PCS | CP0603B1842AS | 1805 - 1880 | 17.5±1 | | | 0.3 |
| | CP0603B1880AS | 1850 - 1910 | 17.5±1 | | | |
| PHP | CP0603B1960AS | 1930 - 1990 | 17.5±1 | | | |
| DECT | CP0603B1907AS | 1895 - 1920 | 17.5±1 | | | |
| Wireless LAN | CP0603B1890AS | 1880 - 1900 | 17.5±1 | 0.45 | | |
| | CP0603B2442AS | 2400 - 2484 | 15.5±1 | | | |

CP0603B****AS



Coupler P/N CP0603B****BS

| Application | P/N Examples | Frequency Band [MHz] | Coupling [dB] | I. Loss max | VSWR max | |
|--------------|---------------|----------------------|---------------|-------------|----------|------|
| AMPS | CP0603B0836BS | 824 - 849 | 25.5±1 | 0.2 | 1.2 | |
| | CP0603B0881BS | 869 - 894 | 25±1 | | | |
| GSM | CP0603B0902BS | 890 - 915 | 25±1 | | | |
| | CP0603B0947BS | 935 - 960 | 24.5±1 | | | |
| E-GSM | CP0603B0897BS | 880 - 915 | 25±1 | | | |
| | CP0603B0942BS | 925 - 960 | 24.5±1 | | | |
| PDC | CP0603B1441BS | 1429 - 1453 | 21±1 | | | 0.25 |
| PCN | CP0603B1747BS | 1710 - 1785 | 19±1 | | | |
| PCS | CP0603B1842BS | 1805 - 1880 | 19±1 | | | 0.25 |
| | CP0603B1880BS | 1850 - 1910 | 18.5±1 | | | |
| PHP | CP0603B1960BS | 1930 - 1990 | 18.5±1 | | | |
| DECT | CP0603B1907BS | 1895 - 1920 | 18.5±1 | | | |
| Wireless LAN | CP0603B1890BS | 1880 - 1900 | 18.5±1 | 0.35 | | |
| | CP0603B2442BS | 2400 - 2484 | 16.5±1 | | | |

CP0603B****BS



Coupler P/N CP0603B****CS

| Application | P/N Examples | Frequency Band [MHz] | Coupling [dB] | I. Loss max | VSWR max | |
|--------------|---------------|----------------------|---------------|-------------|----------|------|
| AMPS | CP0603B0836CS | 824 - 849 | 26.5±1 | 0.2 | 1.2 | |
| | CP0603B0881CS | 869 - 894 | 26±1 | | | |
| GSM | CP0603B0902CS | 890 - 915 | 26±1 | | | |
| | CP0603B0947CS | 935 - 960 | 25.5±1 | | | |
| E-GSM | CP0603B0897CS | 880 - 915 | 26±1 | | | |
| | CP0603B0942CS | 925 - 960 | 25.5±1 | | | |
| PDC | CP0603B1441CS | 1429 - 1453 | 22±1 | | | 0.25 |
| PCN | CP0603B1747CS | 1710 - 1785 | 20.5±1 | | | |
| PCS | CP0603B1842CS | 1805 - 1880 | 20±1 | | | 0.25 |
| | CP0603B1880CS | 1850 - 1910 | 20±1 | | | |
| PHP | CP0603B1960CS | 1930 - 1990 | 19.5±1 | | | |
| DECT | CP0603B1907CS | 1895 - 1920 | 20±1 | | | |
| Wireless LAN | CP0603B1890CS | 1880 - 1900 | 20±1 | 0.35 | | |
| | CP0603B2442CS | 2400 - 2484 | 18±1 | | | |

CP0603B****CS



Important: Couplers can be used at any frequency within the indicated range.

Thin-Film Directional Couplers



CP0603 SMD Type – High Directivity

Coupler P/N CP0603D****AS

| Application | P/N Examples | Frequency Band [MHz] | Coupling [dB] | I. Loss max. [dB] | Return Loss [dB] | Directivity [dB] |
|--------------|---------------|----------------------|---------------|-------------------|------------------|------------------|
| AMPS | CP0603D0836AS | 824 - 849 | 13.50 | 0.50 | 23 | 21 |
| | CP0603D0881AS | 869 - 894 | 13.00 | | | |
| GSM | CP0603D0902AS | 890 - 915 | 12.50 | 1.40 | 16 | 17 |
| | CP0603D0947AS | 935 - 960 | 13.00 | | | |
| E-GSM | CP0603D0897AS | 880 - 915 | 12.50 | 2.00 | 15 | 15 |
| | CP0603D0942AS | 925 - 960 | 9.00 | | | |
| PDC | CP0603D1441AS | 1429 - 1453 | 8.00 | 1.40 | 17 | 18 |
| PCN | CP0603D1747AS | 1710 - 1785 | 7.50 | | | |
| PCS | CP0603D1880AS | 1850 - 1910 | 7.00 | 1.40 | 16 | 17 |
| | CP0603D1960AS | 1930 - 1990 | 7.00 | | | |
| PHP | CP0603D1907AS | 1895 - 1920 | 7.00 | 1.40 | 16 | 17 |
| DECT | CP0603D1890AS | 1880 - 1900 | 7.00 | | | |
| Wireless LAN | CP0603D2442AS | 2400 - 2484 | 5.50 | 2.00 | 15 | 15 |

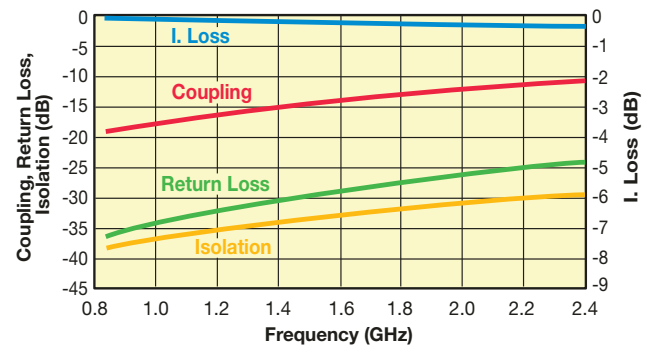
CP0603D****AS



Coupler P/N CP0603D****BW

| Application | P/N Examples | Frequency Band [MHz] | Coupling [dB] | I. Loss max. [dB] | Return Loss [dB] | Directivity [dB] |
|--------------|---------------|----------------------|---------------|-------------------|------------------|------------------|
| AMPS | CP0603D0836BS | 824 - 849 | 20.00 | 0.25 | 36 | 19 |
| | CP0603D0881BS | 869 - 894 | 19.50 | | | |
| GSM | CP0603D0902BS | 890 - 915 | 19.00 | 0.50 | 35 | 19 |
| | CP0603D0947BS | 935 - 960 | 19.00 | | | |
| E-GSM | CP0603D0897BS | 880 - 915 | 19.50 | 0.50 | 36 | 19 |
| | CP0603D0942BS | 925 - 960 | 19.00 | | | |
| PDC | CP0603D1441BS | 1429 - 1453 | 15.50 | 0.40 | 30 | 19 |
| PCN | CP0603D1747BS | 1710 - 1785 | 14.00 | 0.55 | 28 | |
| | CP0603D1842BS | 1805 - 1880 | 13.50 | | | |
| PCS | CP0603D1880BS | 1850 - 1910 | 13.00 | 0.55 | 27 | 19 |
| | CP0603D1960BS | 1930 - 1990 | 13.00 | | | |
| PHP | CP0603D1907BS | 1895 - 1920 | 13.00 | 0.70 | 24 | 19 |
| DECT | CP0603D1890BS | 1880 - 1900 | 13.00 | | | |
| Wireless LAN | CP0603D2442BS | 2400 - 2484 | 11.00 | 0.70 | 24 | 19 |

CP0603D****BS



Important: Couplers can be used at any frequency within the indicated range.



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

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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