

Thin-Film RF/Microwave Directional Couplers

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

High Directivity Directional Couplers For WiFi Bands



CP0302P5425ENTR / CP0302A5425ENTR / CP0402Q5425ENTR / CP0603Q5425ENTR

TECHNOLOGY

These High Directivity LGA Couplers are 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 WiFi Bands Couplers are offered in 0302, 0402 and 0603 standard sizes having identical electrical performance.

APPLICATIONS:

- WiFi
- 4G LTE
- 5G LTE
- Base Stations.
- Automotive
- Industrial



PART NUMBERS

CP0302P5425ENTR

CP0302A5425ENTR

CP0402Q5425ENTR

CP0603Q5425ENTR

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

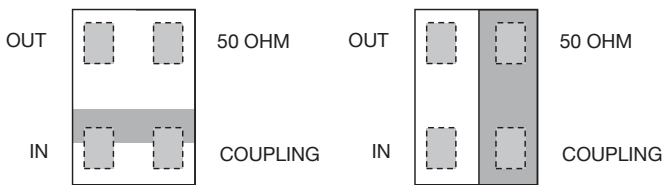
TERMINATION

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

OPERATING TEMPERATURE

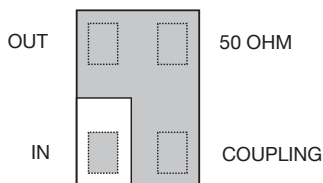
-40°C to +85°C

TERMINALS (TOP VIEW)



CP0302

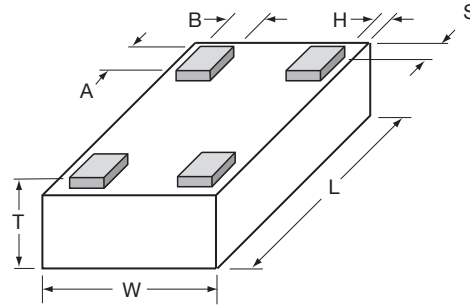
CP0402



CP0603

DIMENSIONS (BOTTOM VIEW)

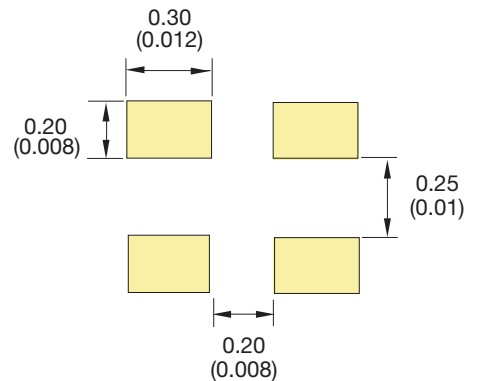
mm (inches)



	CP0302	CP0402	CP0603
L	0.65±0.04 (0.026±0.002)	1.0±0.05 (0.040±0.002)	1.6±0.1 (0.063±0.004)
W	0.50±0.04 (0.02±0.002)	0.58±0.04 (0.023±0.002)	0.84±0.1 (0.033±0.004)
T	0.25±0.05 (0.01±0.002)	0.35±0.05 (0.014±0.002)	0.60±0.1 (0.024±0.004)
A	0.20±0.05 (0.008±0.002)	0.20±0.05 (0.008±0.002)	0.25±0.05 (0.01±0.002)
B	0.10±0.04 (0.004±0.002)	0.18±0.05 (0.007±0.002)	0.20±0.05 (0.008±0.002)
S, H	0.025±0.025 (0.001±0.001)	0.05±0.05 (0.002±0.002)	0.05±0.05 (0.002±0.002)

RECOMMENDED PAD LAYOUT DIMENSIONS:

mm (inches)



CP0302

CP0402 / CP0603: see pages 49 / 53

Thin-Film RF/Microwave Directional Couplers

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

High Directivity Directional Couplers For WiFi Bands



ELECTRICAL CHARACTERISTICS

P/N	Frequency [MHz]	Coupling [dB]	I. Loss max. [dB]	Return Loss [dB]	Directivity [dB]
CP0302P5425ENTR	2,400-2,496	-20±0.5	-0.2	-30	20
	4,900-5,950	-13±0.5	-0.4	-25	20

P/N	Frequency [MHz]	Coupling [dB]	I. Loss max. [dB]	Return Loss [dB]	Directivity [dB]
CP0302A5425ENTR	2,400-2,496	-20±1	-0.2	-30	20
	4,900-5,950	-13±1	-0.4	-25	20

P/N	Frequency [MHz]	Coupling [dB]	I. Loss max. [dB]	Return Loss [dB]	Directivity [dB]
CP0402Q5425ENTR	2,400-2,496	-20±1	-0.3	-30	20
CP0603Q5425ENTR	4,900-5,950	-13±1	-0.4	-25	20

