

## Directional Couplers (Waveguide and Coaxial)

### FEATURES:

- ❖ Rugged construction
- ❖ High directivity
- ❖ Low insertion loss
- ❖ 0.5-110 GHz

### APPLICATIONS:

- ❖ Test equipment
- ❖ Subsystems
- ❖ Power sampling



### DESCRIPTION:

### CDC Series

**Cernex CDC Series** multi-hole directional couplers are offered for the frequency range of 0.5 to 110 GHz in seven waveguide bands. The standard coupling levels are 3, 6, 10, 30 and 40 dB with full waveguide operational bandwidth. The high directivity is achieved via low VSWR built-in termination. The couplers are typically used for power sampling or frequency monitoring with minimum signal loss on the main transmitting path. The multi-hole couplers are especially used in the test setups where power reflection measurement is required.

### SPECIFICATIONS:

#### COAXIAL:

Model Number	Frequency Range (MHz)	Insertion Loss (dB) Max.	Coupling (dB)	Directivity (dB)	Power Avg (W) Max.	VSWR Max.	Connector Type	Case Type (mm)
CDCU3061015T▲	380-6000	1.1	10±0.5	15	-	1.25	SMA	5.5x0.5x0.7
CDCU3081020K	300-8000	1.3	10±1.0	20	20	1.18:1	SMA-F	152.4X18.5X12.7
CDCU3081620K	300-8000	1.0	16±1.0	20	20	1.15:1	SMA-F	152.4X18.5X12.7
CDCU3083020K	300-8000	0.85	30±1.0	20	20	1.15:1	SMA-F	152.4X18.5X12.7
CDCU3121015K	300-12400	1.35	10±1.0	15	20	1.35:1	SMA-F	152.4X18.5X12.7
CDCU3121615K	300-12400	1.20	16±1.2	15	20	1.30:1	SMA-F	152.4X18.5X12.7
CDCU3123015K	300-12400	1.0	30±0.7	15	20	1.35:1	SMA-F	152.4X18.5X12.7
CDCU3181012K	300-18000	1.60	10	12	20	1.4:1	SMA_F	152.4X18.5X12.7
CDCU3183012K	300-18000	1.40	30	12	20	1.4:1	SMA_F	152.4X18.5X12.7
CDCU4041016K	400-4000	1.10	10±0.5	16	20	1.2:1	SMA-F	189 X 24.6 X12.7
CDCU4042025K	400-4000	0.75	20±0.8	25	20	1.2:1	SMA-F	189 X 24.6 X12.7
CDCU4201014T▲	400-20000	1.7	10±0.6	14	-	1.4	SMA	5.5x0.5x0.7
CDCU4203014T▲	400-20000	1.2	30±0.8	14	-	1.5	SMA	5.5x0.5x0.7
CDCU5021020T1	500-2500	0.5	10±1.0	20	50	1.25:1	N-F	139 X 27 X 22
CDCU5022018T1	500-2500	0.4	20±1.0	18	50	1.25:1	N-F	139 X 27 X 22
CDCU5023020T1	500-2000	0.4	30±1.0	20	60	1.25:1	N-F	170 X 30 X 20
CDCU5020620T	500-2000	0.5	6±1.0	20	50	1.2:1	SMA-F	133 X 15 X 11
CDCU5021020T	500-2000	0.5	10±1.0	20	50	1.2:1	SMA-F	133 X 15 X 11

Other coupling values are available



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CDCU5022020T	500-2000	0.4	20±1.0	20	50	1.2:1	SMA-F	133 X 15 X 11
CDCU5023020T	500-2000	0.4	30±1.0	20	50	1.2:1	SMA-F	133 X 15 X 11
CDCU5080615K	500-8000	1.7	6±1.1	15	20	1.35	SMA-F	133 X 18 X 13
CDCU5081020T▲	500-8000	1.2	10±0.4	20	-	1.25	SMA	4.4x0.5x0.7
CDCU5081015K	500-8000	1.3	10±1.0	15	20	1.35:1	SMA-F	133 X 18 X 13
CDCU5081618T	500-8000	0.9	16±0.5	18	-	1.3	SMA	4.4 X 0.5 X 0.7
CDCU5081615K	500-8000	0.85	16±1.0	15	20	1.35:1	SMA-F	133 X 18 X 13
CDCU5082020T▲	500-8000	0.8	20±0.5	20	-	1.3	SMA	4.4 X 0.5 X 0.7
CDCU5082015K	500-8000	0.8	20±1.0	15	20	1.35:1	SMA-F	133 X 18 X 13
CDCU5083020T▲	500-8000	0.7	30±0.5	20	-	1.3	SMA	4.4x0.5x0.7
CDCU5181015K	500-18000	1.5	10±1.0	15	20	1.35	SMA	-
CDCU5181615K	500-18000	1.1	16±1.0	15	20	1.35	SMA	-
CDCU5181010T	500-18000	1.6	10±1.0	10	50	1.6:1	SMA-F	113 X 15 X 11
CDCU5182010T	500-18000	1.6	20±1.0	10	50	1.6:1	SMA-F	113 X 15 X 11
CDCU5183010T	500-18000	1.6	30±1.0	10	50	1.6:1	SMA-F	113 X 15 X 11
CDCU5181012K	500-18500	1.5	10±1.0	12	20	1.35:1	SMA-F	111 X 18.5 X 13
CDCU5181612K	500-18500	1.1	16±1.0	12	20	1.35:1	SMA-F	111 X 18.5 X 13
CDCU5201016T▲	500-20000	1.7	10±0.5	16	-	1.4	SMA	4.4x0.5x0.7
CDCU5201015K	500-20000	1.65	10±1.0	15	20	1.35:1	SMA-F	114 x 18 x 13
CDCU5201315K	500-20000	1.4	13±1.0	15	20	1.35:1	SMA-F	114 x 18 x 13
CDCU5261014T▲	500-26500	2.2	10±0.8	14	-	1.4	SMA	4.4 x 0.5 x 0.7
CDCU5261013K	500-26500	1.5	10±1.0	13	20	1.45:1	SMA-F	111 X 18.5 X 9.6
CDCU5261618T▲	500-26500	0.9	16±0.5	18	-	1.3	SMA	4.4 x 0.5 x 0.7
CDCU5261313K	500-26500	1.5	13±1.0	13	20	1.45:1	SMA-F	111 X 18.5 X 9.6
CDCU5261613K	500-26500	1.4	16±1.0	13	20	1.45:1	SMA-F	111 X 18.5 X 9.6
CDCU5262013K	500-26500	1.35	20±1.0	13	20	1.45:1	SMA-F	111 X 18.5 X 9.6
CDCU5262014T▲	500-26500	1.4	20±0.8	14	-	1.5	SMA	4.4 x 0.5x 0.7
CDCU5263014T▲	500-26500	1.4	30±0.8	14	-	1.4	SMA	4.4X0.5X0.7
CDCU5401010T▲	500-40000	2.9	10+/-0.9	10	20	1.7	K	111.8x12.7x17.8 mm
CDCU6263014T▲	600-26500	0.6	30±0.5	14	20	1.5	SMA	1.25X 0.5 X 0.63
CDCU6263012T▲	600-40000	1.2	30±0.7	12	-	1.7	K	1.25X0.5X0.63
CDCU8020620T▲	800-2500	0.5	6±1.0	20	50	1.2:1	SMA-F	85 X 15 X 11
CDCU5401010T▲	500-40000	2.9	10±0.9	10	-	1.7	SMA	4.4 x 0.5x 0.7
CDCU8021020T	800-2500	0.5	10±1.0	20	50	1.2:1	SMA-F	85 X 15 X 11
CDCU8022020T	800-2500	0.4	20±1.0	20	50	1.2:1	SMA-F	85 X 15 X 11
CDCU8023020T	800-2500	0.4	30±1.0	20	50	1.2:1	SMA-F	85 X 15 X 11
CDCU8020520T	800-2500	0.5	5±0.5	20	60	1.25:1	N-F	105 X 30 X 21

Other coupling values are available



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Model Number	Frequency Range (MHz)	Insertion Loss (dB) Max.	Coupling (dB)	Directivity (dB)	Power Avg (W) Max.	VSWR Max.	Connector Type	Case Type (mm)
CDCU8020620T1	800-2500	0.5	6±0.5	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8020720T	800-2500	0.5	7±0.5	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8021020T1	800-2500	0.5	10±0.8	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8021520T	800-2500	0.5	15±1.0	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8022020T1	800-2500	0.4	20±1.0	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8023020T1	800-2500	0.4	30±1.0	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8020520T1	800-2500	0.4	5±0.5	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8020620T2	800-2500	0.4	6±0.5	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8020720T2	800-2500	0.4	7±0.5	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8021020T2	800-2500	0.4	10±0.8	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8021520T2	800-2500	0.3	15±1.0	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8022020T2	800-2500	0.3	20±1.0	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8023020T2	800-2500	0.3	30±1.0	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8030520T	800-3500	0.4	5±0.5	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8030620T	800-3500	0.4	6±0.5	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8030720T	800-3500	0.4	7±0.5	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8031020T	800-3500	0.4	10±0.5	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8031520T	800-3500	0.4	15±0.5	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8032020T	800-3500	0.3	20±1.0	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8033020T	800-3500	0.3	30±1.0	20	200	1.25:1	N-F	126 X 38 X 20
CDC01040620K	1000-4000	1.30	6±0.5	20	20	1.20:1	SMA-F	89X19 X12.7
CDC01041020K	1000-4000	1.0	10±0.8	20	20	1.2:1	SMA-F	89X19 X12.7
CDC01042020K	1000-4000	0.8	20±0.5	20	20	1.2:1	SMA-F	89X19 X12.7
CDC01040620T	1000-4000	0.5	6±1.0	20	50	1.2:1	SMA-F	73 x 15x 11
CDC01041020T	1000-4000	0.5	10±1.0	20	50	1.2:1	SMA-F	73 x 15x 11
CDC01042020T	1000-4000	0.4	20±1.0	20	50	1.2:1	SMA-F	73 x 15x 11
CDC01043020T	1000-4000	0.4	30±1.0	20	50	1.2:1	SMA-F	73 x 15x 11
CDC01121015K	1000-12400	1.10	10±0.5	15	20	1.35:1	SMA-F	7.62X18.54X13.46
CDC01181012T	1000-18000	1.2	10±1.0	12	50	1.6:1	SMA-F	73 x 15x 11
CDC01182012T	1000-18000	1.2	20±1.0	12	50	1.6:1	SMA-F	73 x 15x 11
CDC01183012T	1000-18000	1.2	30±1.0	12	50	1.6:1	SMA-F	73 x 15x 11
CDC01181016K	1000-18000	1.3	10±0.5	16	20	1.35:1	SMA-F	88 x 18.5 x 13
CDC01181616K	1000-18000	0.9	16±0.5	16	20	1.35:1	SMA-F	88 x 18.5 x 13
CDC01182016K	1000-18000	0.95	20±1.0	16	20	1.35:1	SMA-F	88 x 18.5 x 13
CDC01201016T▲	1000-20000	1.4	10±0.4	16	-	1.4	SMA	2.9 x0.5 x0.65
CDC01201016K	1000-20000	1.4	10±10.5	16	20	1.35:1	SMA-F	88.9 x 18.5 x 13.4
CDC01201613K	1700-20000	1.0	16±1.0	13	20	1.45:1	3.5mm-F	60.9 x 17.5 x 6.6

Other coupling values are available



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Model Number	Frequency Range (MHz)	Insertion Loss (dB) Max.	Coupling (dB)	Directivity (dB)	Power Avg (W) Max.	VSWR Max.	Connector Type	Case Type (mm)
CDC01201020K	1000-20000	1.4	10±0.5	16	20	1.35:1	SMA-F	88.9 x 18.5 x 13.4
CDC01201616K	1000-20000	1.1	16±1.0	16	20	1.35:1	SMA-F	88.9 x 18.5 x 13.4
CDC01202016K	1000-20000	1.0	20±1.0	16	20	1.35:1	SMA-F	88.9 x 18.5 x 13.4
CDC01260610T	1000-26500	1.6	6±1.0	10	30	1.6:1	3.5mm-F	69 x 15 x 11
CDC01260613K	1000-26500	2.0	6±1.0	13	20	1.5:1	3.5mm-F	73 x 16 x 13
CDC01261014T▲	1000-26500	1.6	10±0.5	14	-	1.4	SMA	2.9x0.5x0.65
CDC01261014K	1000-26500	1.6	10±1.0	14	20	1.4:1	3.5mm-F	73 x 16 x 13
CDC01261616T▲	1000-26500	1.5	16±0.5	16	-	1.4	K	2.9 X 0.5 X 0.65
CDC01262014K	1000-26500	1.2	20±1.0	14	20	1.4:1	3.5mm-F	73 x 16 x 13
CDC01262014T▲	1000-26500	1.2	20±0.7	14	20	1.5:1	SMA-F	88.9 x 17.8 x 12.7
CDC01400610K	1000-40000	3.5	6±1.0	10	20	1.7:1	2.4mm-F	51 x 16.51 x 10
CDC01401010T▲	1000-40000	2.5	10±0.6	10	-	1.7	K	3.5 X 0.5 X 0.7
CDC01401010K1	1000-40000	2.0	10±1.0	10	20	1.7:1	2.92mm-F	51 x 16.51 x 10
CDC01402010K1	1000-40000	1.5	20±1.0	10	20	1.7:1	2.92mm-F	50.8 x 16.51 x 10.16
CDC01402010K	1000-40000	1.5	20±1.0	10	20	1.7:1	2.4mm-F	50.8 x 16.51 x 10.16
CDC01401310K1	1000-40000	1.8	13±1.0	10	20	1.7:1	2.92mm-F	51 x 16.51 x 10
CDC01401010K	1000-40000	2.0	10±1.0	10	20	1.7:1	2.4mm-F	51 x 16.51 x 10
CDC01401311T▲	1000-40000	2.2	13±0.8	11	-	1.7:1	K	3.1 x 0.5 x 0.8
CDC01401310K	1000-40000	1.8	13±1.0	10	20	1.7:1	2.4mm-F	51 x 16.51 x 10
CDC01402010K	1000-40000	1.5	20±1.0	10	20	1.7:1	2.4mm-F	51 x 16.51 x 10
CDC01402010T▲	1000-40000	1.8	20±0.7	10	-	1.7	K	3.5 x 0.5 x 0.7
CDC01501310K	1000-50000	1.6	13±1.0	10	20	1.8:1	2.4mm-F	63.5x16.51x12.7
CDC01651320K	1000-65000	3.5	13±1.5	15	20	1.9:1	1.85mm-F	63.5x16.51x12.7
CDC01261014K1	1700-26500	1.5	10±1.0	14	20	1.45:1	3.5mm-F	61 x 17.5 x 13.4
CDC01261614K1	1700-26500	1.2	16±1.0	14	20	1.45:1	3.5mm-F	61 x 17.5 x 13.4
CDC02080620T	2000-8000	0.5	6±1.0	20	50	1.2:1	SMA-F	43 x 15 x 11
CDC02081020T	2000-8000	0.5	10±1.0	20	50	1.2:1	SMA-F	43 x 15 x 11
CDC02082020T	2000-8000	0.4	20±1.0	20	50	1.2:1	SMA-F	43 x 15 x 11
CDC02083020T	2000-8000	0.4	30±1.0	20	50	1.2:1	SMA-F	43 x 15 x 11
CDC02080620K	2000-8000	1.60	6±0.5	20	50	1.20:1	SMA-F	45.97X17.02X10.16
CDC02081020K	2000-8000	0.75	10±0.5	20	50	1.20:1	SMA-F	45.97X17.02X10.16
CDC02082020K	2000-8000	0.35	20±1.0	20	50	1.20:1	SMA-F	45.97X17.02X10.16
CDC02081620K	2000-8600	0.50	16±1.0	20	50	1.30:1	SMA-F	54.10X18.54X10.16
CDC02180616K	2000-18000	1.9	6±1.0	16	20	1.30:1	SMA-F	53 x 17.5 x 13
CDC02180620K	2000-18000	1.9	6±1.0	20	20	1.30:1	SMA-F	*
CDC02181016T▲	2000-18000	1.1	10±0.4	16	-	1.3	SMA	2.25 x 0.5 x 0.7
CDC02181016K	2000-18000	1.10	10±0.5	16	20	1.30:1	SMA-F	52.8X17.5X13.5

Other coupling values are available



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CDC02181616K	2000-18000	0.75	16±0.5	16	20	1.30:1	SMA-F	52.8X17.5X13.5
CDC02181616T▲	2000-18000	0.8	16±0.5	16	-	1.3	SMA	2.25 x 0.5 x 0.7
CDC02181616K	2000-18000	0.75	16±1.0	16	20	1.30:1	SMA-F	52.8X17.5X13.5
CDC02182016T▲	2000-18000	1.3	20±0.5	16	-	1.3	SMA	2.25x 0.5 x0.7
CDC02182016K	2000-18000	0.70	20±1.0	16	20	1.30:1	SMA-F	52.8X17.5X13.5
CDC02181012T	2000-18000	0.7	10±1.0	12	50	1.5:1	SMA-F	43 x 15 x 11
CDC02182012T	2000-18000	0.7	20±1.0	12	50	1.5:1	SMA-F	43 x 15 x 11
CDC02183012T	2000-18000	0.7	30±1.0	12	50	1.5:1	SMA-F	43 x 15 x 11
CDC02201015T▲	2000-20000	1.4	10±0.4	15	-	1.3	SMA	2.25 x0.5 0.7
CDC02200616K	2000-20000	1.9	6±1.0	16	20	1.35:1	SMA-F	52.8 x 17.5 x 13
CDC02201016K	2000-20000	1.3	10±0.5	16	20	1.35:1	SMA-F	52.8 x 17.5 x 13
CDC02201616K	2000-20000	1.0	16±0.5	16	20	1.35:1	SMA-F	52.8 x 17.5 x 13
CDC02202016K	2000-20000	0.9	20±1.0	16	20	1.35:1	SMA-F	52.8 x 17.5 x 13
CDC02261013T▲	2000-26500	1.7	10±0.6	13	-	1.5	SMA	2.25 x 0.5 x0.7
CDC02261613T▲	2000-26500	1.2	16±0.5	13	-	1.5	SMA	2.25x 0.5 x0.7
CDC02262013T▲	2000-26500	1.1	20±0.5	13	-	1.5	SMA	2.25 x 0.5 x0.7
CDC02401011K	2000-40000	1.2	10±1.0	11	20	1.7:1	2.4mm-F	44 x 16.5 x 10
CDC02401010T▲	2000-40000	1.7	10±0.6	10	-	1.7	K	2.4 X0.5 X0.7
CDC02401312T▲	2000-40000	1.7	13±0.7	12	-	1.7	K	2.4 X 0.5 X0.7
CDC02401311K	2000-40000	1.7	13±1.0	11	20	1.7:1	2.4mm-F	44 x 16.5 x 10
CDC02401616T▲	2000-40000	1.6	16±0.5	16	-	1.7	K	2.4X 0.5 0.7
CDC02401611K	2000-40000	1.6	16±1.0	11	20	1.7:1	2.4mmF	44 x 16.5 x 10
CDC02461310K	2000-46000	1.8	13±1.0	10	20	1.8:1	2.4mm-F	44 x 16.5 x 10
CDC02501010K	2000-50000	2.0	10±1.0	10	20	1.8:1	2.4mm-F	44 x 16.5 x 10
CDC02501310K	2000-50000	1.8	13±1.0	10	20	1.8:1	2.4mm-F	44 x 16.5 x 10
CDC02501610K	2000-50000	1.7	16±1.0	10	20	1.8:1	2.4mm-F	44 x 16.5 x 10
CDC04120615K	4000-12400	1.8	6±0.5	15	20	1.35:1	SMA	35.56X16.76X10.16
CDC04121015K	4000-12400	0.9	10±0.5	15	20	1.35:1	SMA	35.56X16.76X10.16
CDC04122015K	4000-12400	0.5	20±1.0	15	20	1.35:1	SMA	35.56X16.76X10.16
CDC04123015K	4000-12400	0.5	30±1.0	15	20	1.35:1	SMA	35.56X16.76X10.16
CDC04181012T	4000-18000	0.6	10±1.0	12	50	1.5:1	SMA-F	34.5x16.8x9.7
CDC04182012T	4000-18000	0.6	20±1.0	12	50	1.5:1	SMA-F	34.5x16.8x9.7
CDC04183012T	4000-18000	0.6	30±1.0	12	50	1.5:1	SMA-F	34.5x16.8x9.7
CDC04200615K	4000-20000	1.9	6±0.5	15	20	1.35:1	SMA-F	35.5 x 16.7 x 10
CDC04201015K	4000-20000	1.0	10±0.5	15	20	1.35:1	SMA-F	35.5 x 16.7 x 10
CDC04202015K	4000-20000	0.6	20±1.0	15	20	1.35:1	SMA-F	35.5 x 16.7 x 10
CDC04203020K	4000-20000	0.6	30±1.0	15	20	1.35:1	SMA-F	35.5 x 16.7 x 10

Other coupling values are available



## Directional Couplers (Waveguide and Coaxial)

Model Number	Frequency Range (MHz)	Insertion Loss (dB) Max.	Coupling (dB)	Directivity (dB)	Power Avg (W) Max.	VSWR Max.	Connector Type	Case Type (mm)
CDC06181016T▲	6000-18000	0.9	10±0.3	16	-	1.3	SMA	1.25 X0.5 X0.63
CDC06260614K	6000-26500	1.6	6±1.0	14	20	1.4:1	3.5mm-F	28.44X16.25X13.4
CDC06261016T▲	6000-26500	1.4	10±0.4	16	-	1.4	SMA	1.25x 0.5 x0.63
CDC06261013K	6000-26500	1.3	10±0.5	13	20	1.4:1	3.5mm-F	28.44X16.25X13.4
CDC06262014K	6000-26500	.80	20±1.0	14	20	1.4:1	3.5mm-F	28.44X16.25X13.4
CDC06262015T▲	6000-26500	0.8	20±0.5	15	-	1.4:1	SMA	1.25 X 0.5 X 0.63
CDC06263014K	6000-26500	0.70	30±1.0	14	20	1.45:1	3.5mm-F	28.44X16.25X13.4
CDC06401010T▲	6000-40000	1.60	10±1.0	10 Min.	-	1.8:1	2.92mm-F	28X15X11
CDC06402012T▲	6000-40000	1.3	20±0.5	12	-	1.7	K	1.25X 0.5 X0.63
CDC06403012T	6000-40000	1	30±0.5	12	-	1.7	K	1.25x 0.5 x0.63
CDC07120615K	7000-12400	1.8	6±0.5	15	20	1.35:1	SMA-F	35.56X16.76X10.1
CDC07121015K	7000-12400	0.90	10±0.5	15	20	1.35:1	SMA-F	35.56X16.76X10.1
CDC07122015K	7000-12400	.50	20±1.0	15	20	1.35:1	SMA-F	35.56X16.76X10.1
CDC07123015K	7000-12400	0.5	30±1.0	15	20	1.35:1	SMA-F	35.56X16.76X10.1
CDC10401012T▲	10000-40000	1.7	10±0.5	12	-	1.6	K	1.25 X 0.5 X0.63
CDC10401010K	10000-40000	1.7	10±0.7	10	20	1.7:1	2.4mm-F	28 x 15 x 10
CDC10402012T▲	10000-40000	1.3	20±0.6	12	-	1.7	K	1.25 X 0.5 X0.63
CDC10402010K	10000-40000	1.3	20±1.0	10	20	1.7:1	2.4mm-F	28 x 15 x 10
CDC10460610K	10000-46000	2.4	6±0.7	10	20	1.8:1	2.4mm-F	28 x 15 x 10
CDC10461010K	10000-46000	1.9	10±0.7	10	20	1.8:1	2.4mm-F	28 x 15 x 10
CDC10462010K	10000-46000	1.5	20±1.0	10	20	1.8:1	2.4mm-F	28 x 15 x 10
CDC10500610K	10000-50000	2.4	6±0.07	10	20	1.8:1	2.4mm-F	28 x 15 x 10
CDC10501010K	10000-50000	1.9	10±0.7	10	20	1.8:1	2.4mm-F	28 x 15 x 10
CDC10502010K	10000-50000	1.5	20±1.0	10	20	1.8:1	2.4mm-F	28 x 15 x 10
CDC10671607K	10000-67000	1.95	16±1.1	7.25	20	2.0:1	1.85mm--	33 X 15.7X 12.7
CDC12180615K	12400-18000	1.9	6±0.5	15	20	1.35:1	SMA-F	35.56X16.76X10.16
CDC12181015K	12400-18000	1.0	10±0.5	15	20	1.35:1	SMA-F	35.56X16.76X10.16
CDC12182015K	12400-18000	0.6	20±1.0	15	20	1.35:1	SMA-F	35.56X16.76X10.16
CDC12183015K	12400-18000	0.6	30±1.0	15	20	1.35:1	SMA-F	35.56X16.76X10.16
CDC18260613K	18000-26500	1.6	6±0.8	13	20	1.4:1	3.5mmF	28.45x16.26x13.4
CDC18261014T▲	18000-26500	1.4	10±0.3	14	-	1.4	SMA	1.25 X 0.5 X 0.63
CDC18261014K	18000-26500	1.3	10±0.5	14	20	1.4:1	3.5mm-F	28.45x16.26x13.4
CDC18262014T▲	18000-26500	0.8	20±0.4	14	-	1.4:1	SMA	1.25 x 0.5 x 0.63
CDC18262014K	18000-26500	0.8	20±1.0	14	20	1.4:1	3.5mm-F	28.45x16.26x13.4
CDC18263014T▲	18000-26500	0.7	30±0.4	14	-	1.4	SMA	1.25 x 0.5 x 0.63
CDC18263014K	18000-26500	0.8	30±1.0	14	20	1.4:1	3.5mm-F	28.45x16.26x13.4
CDC18401012T▲	18000-40000	1.7	10±0.5	12	-	1.7	K	1.25 X0.5 X0.63
CDC18401012K	18000-40000	1.7	10±0.7	12	20	1.7:1	2.92mm-F	28.45x16.26x13.4

Other coupling values are available



## Directional Couplers (Waveguide and Coaxial)

Model Number	Frequency Range (MHz)	Insertion Loss (dB) Max.	Coupling (dB)	Directivity (dB)	Power Avg (W) Max.	VSWR Max.	Connector Type	Case Type (mm)
CDC18401012T	18000-40000	1.5	10±0.7	12	20	1.7:1	2.92mm-F	31.8x15.8x12.7
CDC18402012T▲	18000-40000	1.3	20±1.0	12	20	1.7:1	2.92mm-F	31.8x15.8x12.7
CDC18402012K	18000-40000	1.3	20±1.0	12	20	1.7:1	2.92mm-F	28.45x16.26x13.4
CDC18403012T▲	18000-40000	1	30±0.5	12	-	1.7:1	K	1.25 X 0.5 x 0.63
CDC18501010K	18000-50000	1.9	10±0.7	10	20	1.8:1	2.4mm-F	28.45x15.75x10.1
CDC18502010K	18000-50000	1.5	20±1.0	10	20	1.8:1	2.4mm-F	28.45x15.75x10.1
CDC26400610K	26500-40000	2.4	6±0.7	10	20	1.8:1	2.4mm-F	28.45x15.75x10.1
CDC26401012K	26500-40000	1.7	10±0.7	12	20	1.7:1	2.4mm-F	28.45x15.75x10.1
CDC26401012T	26500-40000	1.7	10±0.7	12	20	1.7:1	2.4mm-F	31.8x15.8x12.7
CDC26402012T▲	26500-40000	1.3	20±0.5	12	-	1.7	K	1.25 x 0.5 x 0.63
CDC26402012K	26500-40000	1.3	20±1.0	12	20	1.7:1	2.4mm-F	28.45x15.75x10.1
CDC26403013T▲	26500-40000	1	30±1.0	13	-	1.7:1	K	1.25 X 0.5 X 0.63
CDC26501010T	26500-50000	1.9	10±0.7	10	20	1.8:1	2.4mm-F	31.8x15.8x12.7
CDC26501010K	26500-50000	1.9	10±0.7	10	20	1.8:1	2.4mm-F	28.45x15.75x10.1
CDC26502010K	26500-50000	1.5	20±1.0	10	20	1.8:1	2.4mm-F	28.45x15.75x10.1

OTHER FREQUENCIES ARE ALSO AVAILABLE.\*CONSULT THE FACTORY.

### ▲ Removable Connector

#### WAVEGUIDE:

Waveguide Band	K	Kb	Ka	Q	U	V	E	W
Frequency Range (GHz)	18 to 26.5	22 to 33.0	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110
Waveguide Size	WR-42	WR34	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
Coupling Level (dB, Typical)	3, 6, 10, 20, 30 and 40							
Coupling Flatness (dB, Maximum)	± 0.4	± 0.4	± 0.4	± 0.4	± 0.4	± 0.4	± 0.4	± 0.5
Insertion Loss (dB, Typical)*	0.7	0.7	0.7	0.7	0.8	1.0	1.2	1.5
Directivity (dB, Typical)	20, 25, 30, 35, 40							
Main Line VSWR (Maximum)	1.1:1	1.1:1	1.1:1	1.1:1	1.2:1	1.2:1	1.2:1	1.2:1
Secondary Line VSWR (Maximum)	1.1:1	1.1:1	1.1:1	1.2:1	1.2:1	1.2:1	1.25:1	1.25:1

CONTACT FACTORY FOR OTHER WAVEGUIDE SIZE OR COUPLING LEVEL NEEDS.

\* INSERTION LOSS IS DEFINED AS THE POWER LOSS IN ADDITION TO THE COUPLING LOSS

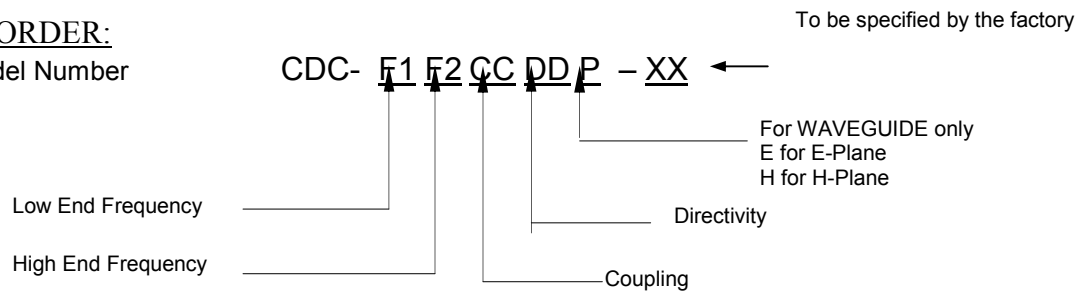
Other coupling values are available

## Directional Couplers (Waveguide and Coaxial)

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### HOW TO ORDER:

Specify Model Number



**Example: To order a coupler with F1 at 20GHz and F2 at 21 GHz with coupler level of 20dB and a 15dB Minimum directivity, specify CDC-20212015-XX.**

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE

Other coupling values are available