

# SUB-MINIATURE COUPLERS, DIRECTIONAL SMA FEMALE 0.5-18 GHz

## SERIES CA, CL

### GENERAL INFORMATION

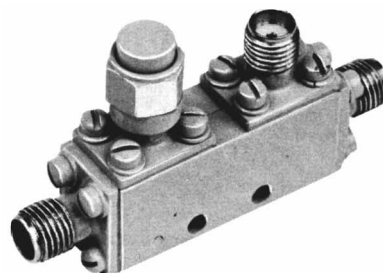
KDI/Triangle miniature stripline couplers, are available in 6 dB, 10 dB, 20 dB and 30dB, coupling values. These units feature high directivity and low VSWR and are conservatively rated to ensure the most reliable service and performance under severe environmental conditions. The directional couplers shown on this page are unequalled in terms of size and performance. The volume of these couplers make them ideally suited for applications involving high density packaging. As evidenced by the specifications, no compromise has been made with electrical performance in order to achieve sub-miniaturization.

### GENERAL SPECIFICATIONS

<b>Frequency Range:</b>	0.5 to 18.0 GHz
<b>RF Impedance:</b>	50 Ohms
<b>RF Power:</b>	The peak and average power handling capability of the couplers apply if the main line is terminated in a 1.25 maximum VSWR for the 6 dB & 10 dB couplers, and in a 1.75 maximum VSWR for the 20 dB and 30 dB couplers.
<b>Operating Temperature:</b>	-55°C to +85°C
<b>Connectors:</b>	SMA female

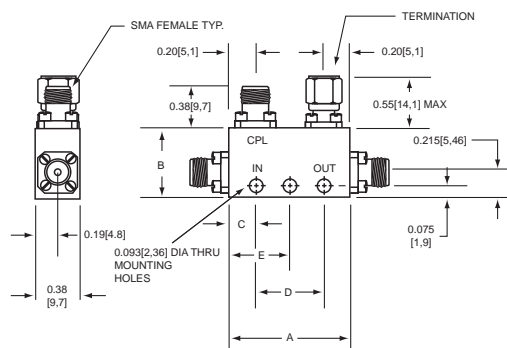
### MECHANICAL OUTLINES

OUTLINE	A in [mm]	B (Note 2) in [mm]	C in [mm]	D in [mm]	E in [mm]
1	3.10 [78,74]	0.50 [12,7]	0.80 [20,3]	1.50 [38,1]	—
2	3.40 [86,36]	0.50 [12,7]	0.95 [24,13]	1.50 [38,1]	—
3	2.50 [63,5]	0.50 [12,7]	0.60 [15,2]	1.30 [33,02]	—
4	1.80 [45,7]	0.55 [13,97]	0.43 [10,92]	0.94 [23,88]	—
5	1.40 [35,56]	0.50 [12,7]	0.50 [12,7]	0.40 [10,2]	—
6	1.00 [25,4]	0.50 [12,7]	—	—	0.50 [12,7]
7	1.30 [33,02]	0.50 [12,7]	—	—	0.65 [16,51]
8	0.90 [22,86]	0.50 [12,7]	—	—	0.45 [11,4]
9	2.56 [65,02]	0.75 [19,1]	0.09 [2,29]	0.5 [12,7]	1.55 [39,37]
10	3.80 [96,52]	0.75 [19,1]	NA	NA	NA

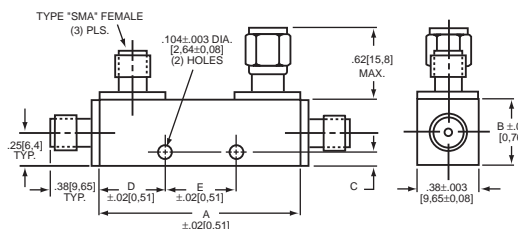


#### Notes:

1. Rugged 4 hole connector construction insures mechanical superiority
2. For all 30 dB couplers B dimension is 0.55/[14.0]
3. 50 ohm termination is supplied on each unit delivered. Power rating is 1.0 watt at +25°C.
4. Coupling includes frequency flatness & coupling measurement in reference to input port.



SERIES CA OUTLINES 1-8



SERIES CL OUTLINES 9-10

KEY: Inches[Millimeters] .XX ±.03 .XXX ±.010 [.X ±0.8 .XX ±0.25]



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# COUPLERS, DIRECTIONAL

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Model No.	Frequency Range GHz	Coupling (Note 4) dB	Frequency Flatness (Note 4) dB	Minimum Directivity dB	Maximum Input/Output VSWR	Maximum Insertion Loss Above Coupling Loss dB	Maximum Peak Power kW	Maximum Avg. Power Watts	Outline
CA-516	.5-1.0	6 ± 1.0	±0.6	18	1.20	0.15	3	50	1
CA-511	.5-1.0	10 ± 1.2	±0.75	20	1.20	0.15	3	50	1
CA-512	.5-1.0	20 ± 1.2	±0.75	20	1.20	0.15	3	50	1
CA-513	.5-1.0	30 ± 1.2	±0.75	20	1.20	0.15	3	50	1
CA-526	.5-2.0	6 ± 1.0	±0.6	18	1.20	0.2	3	50	2
CA-521	.5-2.0	10 ± 1.2	±0.75	20	1.20	0.2	3	50	2
CA-522	.5-2.0	20 ± 1.2	±0.75	20	1.20	0.2	3	50	2
CA-523	.5-2.0	30 ± 1.2	±0.75	18	1.20	0.2	3	50	2
CL-7530-20	0.75-3.0	20 ± 1.0	±0.75	20	1.30	0.2	3	100	9
CL-0833-10	.8-3.3	10 ± 1.25	±0.75	20	1.25	0.2	3	100	9
CA-556	.75-1.5	6 ± 1.0	±0.6	20	1.20	0.2	3	50	3
CA-551	.75-1.5	10 ± 1.2	±0.75	20	1.20	0.2	3	50	3
CA-552	.75-1.5	20 ± 1.2	±0.75	20	1.20	0.2	3	50	3
CA-553	.75-1.5	30 ± 1.2	±0.75	20	1.20	0.2	3	50	3
CA-596	1.0-2.0	6 ± 1.0	±0.6	20	1.20	0.2	3	50	4
CA-591	1.0-2.0	10 ± 1.2	±0.75	20	1.20	0.2	3	50	4
CA-592	1.0-2.0	20 ± 1.2	±0.75	20	1.20	0.2	3	50	4
CA-593	1.0-2.0	30 ± 1.2	±0.75	20	1.20	0.2	3	50	4
CL-1040-20	1.0-4.0	20 ± 1.0	±0.3	20	1.25	0.25	3	50	10
CA-636	1.5-3.0	6 ± 1.0	±0.6	20	1.20	0.2	3	50	5
CA-631	1.5-3.0	10 ± 1.2	±0.75	20	1.20	0.2	3	50	5
CA-632	1.5-3.0	20 ± 1.2	±0.75	20	1.20	0.2	3	50	5
CA-633	1.5-3.0	30 ± 1.2	±0.75	20	1.20	0.2	3	50	5
CA-676	2.0-4.0	6 ± 1.0	±0.6	20	1.25	0.2	3	40	6
CA-671	2.0-4.0	10 ± 1.2	±0.75	20	1.25	0.2	3	40	6
CA-672	2.0-4.0	20 ± 1.2	±0.75	20	1.25	0.2	3	40	6
CA-673	2.0-4.0	30 ± 1.2	±0.75	20	1.25	0.2	3	40	6
CA-696	2.0-8.0	6 ± 1.0	±0.6	17	1.30	0.3	2	20	7
CA-691	2.0-8.0	10 ± 1.2	±0.75	17	1.30	0.3	2	20	7
CA-692	2.0-8.0	20 ± 1.2	±0.75	17	1.30	0.3	2	20	7
CA-693	2.0-8.0	30 ± 1.2	±0.75	17	1.30	0.3	2	20	7
CA-716	2.6-5.2	6 ± 1.0	±0.6	20	1.25	0.25	3	40	8
CA-711	2.6-5.2	10 ± 1.2	±0.75	20	1.25	0.25	3	40	8
CA-712	2.5-5.2	20 ± 1.2	±0.75	20	1.25	0.25	3	40	8
CA-713	2.6-5.2	30 ± 1.2	±0.75	20	1.25	0.25	3	40	8
CA-776	6.0-18.0	6 ± 1.0	±0.6	14	1.45	0.55	2	20	8
CA-771	6.0-18.0	10 ± 1.0	±0.6	14	1.45	0.55	2	20	8
CA-772	6.0-18.0	20 ± 1.2	±0.7	14	1.45	0.55	2	20	8
CA-773	6.0-18.0	30 ± 1.25	±0.7	14	1.45	0.55	2	20	8
CA-756	4.0-8.0	6 ± 1.0	±0.6	18	1.25	0.3	3	40	8
CA-751	4.0-8.0	10 ± 1.2	±0.75	18	1.25	0.3	3	40	8
CA-752	4.0-8.0	20 ± 1.2	±0.75	18	1.25	0.3	3	40	8
CA-753	4.0-8.0	30 ± 1.2	±0.75	18	1.25	0.3	3	40	8
CA-796	7.0-12.4	6 ± 1.0	±0.5	17	1.30	0.45	2	30	8
CA-791	7.0-12.4	10 ± 1.0	±0.5	17	1.30	0.45	2	30	8
CA-792	7.0-12.4	20 ± 1.0	±0.5	17	1.30	0.45	2	30	8
CA-793	7.0-12.4	30 ± 1.0	±0.5	17	1.30	0.45	2	30	8
CA-836	8.0-16.0	6 ± 1.0	±0.5	15	1.40	0.5	2	30	8
CA-831	8.0-16.0	10 ± 1.0	±0.6	15	1.40	0.5	2	30	8
CA-832	8.0-16.0	20 ± 1.2	±0.7	15	1.40	0.5	2	30	8
CA-833	8.0-16.0	30 ± 1.25	±0.7	15	1.40	0.5	2	30	8
CA-876	8.0-18.0	6 ± 1.0	±0.6	14	1.45	0.55	2	20	8
CA-871	8.0-18.0	10 ± 1.0	±0.6	14	1.45	0.55	2	20	8
CA-872	8.0-18.0	20 ± 1.2	±0.7	14	1.45	0.55	2	20	8
CA-873	8.0-18.0	30 ± 1.25	±0.7	14	1.45	0.55	2	20	8
CA-916	12.4-18.0	6 ± 1.0	±0.5	15	1.40	0.55	2	30	8
CA-911	12.4-18.0	10 ± 1.0	±0.5	15	1.40	0.55	2	30	8
CA-912	12.4-18.0	20 ± 1.0	±0.5	15	1.40	0.55	2	30	8
CA-913	12.4-18.0	30 ± 1.0	±0.5	15	1.40	0.55	2	30	8

## Notes:

1. Coupling includes Frequency Flatness. Coupling measurement is referenced to Input Port.

KEY: Inches[Millimeters] .XX ±.03 .XXX ±.010 [.X ±0.8 .XX ±0.25]



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