



QJC Series

Precision Crossguide Couplers



SPECIFICATIONS

FREQUENCY BAND	K	Ka	Q	U	V	E	W	F	D
Frequency Range (GHz)	18-26.5	26.5-40	33-50	40-60	50-75	60-90	75-110	90-140	110-170
Waveguide Size*	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10	WR-8	WR-6
Coupling Values** (dB at center frequency)	10, 20, 30, 40 (± 1)								
Coupling Flatness (\pm dB MAX)	± 1.5	± 1.5	± 1.5	± 1.5	± 1.8	± 1.8	± 1.8	± 2.0	± 2.0
Directivity (dB typ) ^{1,3}	20	20	20	20	20	20	20	15	15
Insertion Loss (dB MAX) ²	0.4	0.4	0.5	0.6	0.6	0.8	1	1.2	1.3
VSWR, Main Line (typ)	1.15:1	1.15:1	1.15:1	1.15:1	1.2:1	1.2:1	1.2:1	1.2:1	1.25:1
VSWR, Secondary Line (typ)	1.2:1	1.2:1	1.2:1	1.2:1	1.25:1	1.25:1	1.25:1	1.25:1	1.25:1
Bandwidth (MAX)	20% of waveguide band								

* Other waveguide sizes are available.

** Custom coupling values are available.

¹ Directivity is the difference between power levels at the coupled port when input and output ports are interchanged.

² Insertion loss is defined as the power loss in excess of the loss due to coupling.

³ For 30 dB and 40 dB couplers: directivity = 25 dB typ.

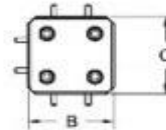
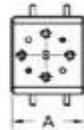
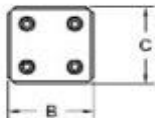
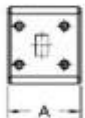
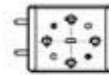


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MECHANICAL SPECIFICATIONS/OUTLINE DRAWINGS

FREQUENCY BAND	WAVEGUIDE SIZE	FLANGE PATTERN	OUTLINE DIMENSIONS, inches/mm	
			A	B, C
K	WR-42	UG-595/U	1.07/27.2	1.25/31.8
Ka	WR-28	UG-599/U	0.90/22.9	1.00/25.4
Q	WR-22	UG-383/U	1.39/35.3	1.38/35.1
U	WR-19	UG-383/U-M	1.39/35.3	1.38/35.1
V	WR-15	UG-385/U	0.85/21.6	1.00/25.4
E	WR-12	UG-387/U	0.85/21.6	1.00/25.4
W	WR-10	UG-387/U-M	0.85/21.6	1.00/25.4
F	WR-8	UG-387/U-M	0.85/21.6	1.00/25.4
D	WR-6	UG-387/U-M	0.85/21.6	1.00/25.4



WR-42 and WR-28

WR-22 through WR-6