

CWK-R-G SERIES - DIRECTIONAL COUPLERS

TECHNICAL FEATURE

FEATURES

- 0.5 to 40 GHz
- Ultra-Broadband Stripline
- Standard Coupling Values
- K-Connectors

<u>PRINCIPAL SPECIFICATIONS</u>									
Model Number	Frequency Range, GHz	Coupling [⌘] , dB, Nom.	Freq. Sensit., dB, Max.	Directivity, dB, Min.	*Insertion Loss, dB, Max	VSWR Max., Main Coupled Line		Coupled Pwr "Loss", dB, Max.	Out-line Ref.
CWK-10R-20.2G	0.5 - 40.0	10 ±1.0	±1.5	10	3.3	1.7:1	1.8:1	0.46	1
CWK-10R-21G	2.0 - 40.0	10 ±1.0	±0.65	11	1.9	1.6:1	1.7:1	0.46	4
CWK-16R-21G		16 ±1.0			1.4			0.08	
CWK-10R-23G	6.0 - 40.0	10 ±1.0	±0.7	12	1.7	1.8:1	1.9:1	0.46	3
CWK-20R-23G		20 ±1.0			1.3			0.044	
CWK-10R-29G	18.0 - 40.0	10 ±1.0	±0.65	12	1.7	1.8:1	1.9:1	0.46	3
CWK-20R-29G		20 ±1.0			1.3			0.044	

[⌘]Coupling is referenced to the output * Insertion Loss **above** Coupled Power "Loss"

General Notes:

1. The CWK-R series of directional couplers are 3 port devices utilizing stripline technology in a connectorized package. Each unit is a multi-section quarter wave coupler designed to cover a very broad band of frequencies. They are ideally suited for monitoring forward or reflected power in EW and similar wideband systems with minimal perturbation to the main line.

2. Similar directional couplers and detectors may be custom ordered with coupling values up to 35 dB and over selected frequency bands up to 40 GHz and to 65 GHz with V connectors.

3. These units comply with MIL-C-15370 and may be supplied screened for compliance with additional specifications you designate for military and aerospace applications requiring the highest reliability.

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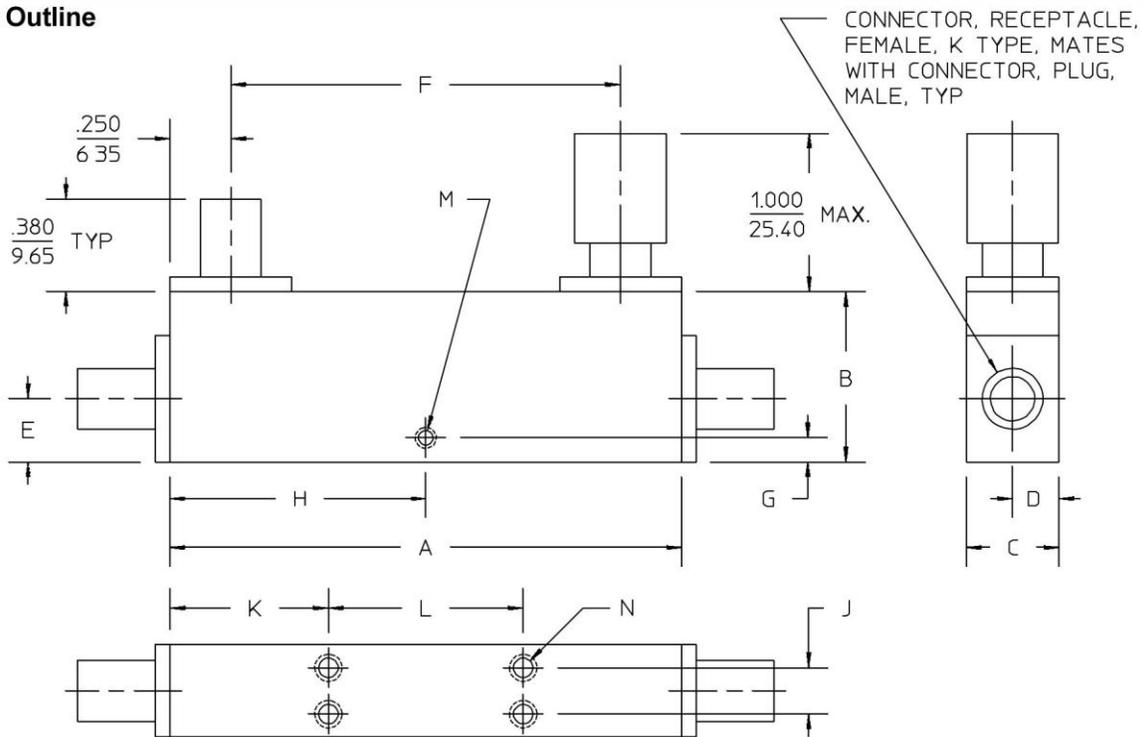
GENERAL SPECIFICATIONS

Impedance:	50 Ω nom.
CW Input Power:	20 W max.
Peak Input Power:	3 kW max.
Reflected Power:	
10/12 dB units:	4 Watts max.
16/20 dB units:	50 Watts max.
Operating Temperature:	- 55° to +85°C
Other Coupling Values:	Check factory
Other Frequency Bands:	Check factory
Special Screening:	Check factory

CWK-R-G SERIES - DIRECTIONAL COUPLERS

PACKAGE OUTLINE

Package Outline



OUTLINE	A	B	C	D	E	F	G	H	J	K	L
1	$\frac{4.400}{111.76}$	$\frac{.700}{17.78}$	$\frac{.500}{12.70}$	$\frac{.250}{6.35}$	$\frac{.250}{6.35}$	$\frac{3.900}{99.06}$	—	—	$\frac{.300}{7.62}$	$\frac{1.000}{25.40}$	$\frac{2.400}{60.96}$
2	$\frac{2.350}{59.69}$	$\frac{.600}{15.24}$	$\frac{.500}{12.70}$	$\frac{.250}{6.35}$	$\frac{.250}{6.35}$	$\frac{1.850}{46.99}$	—	—	$\frac{.265}{6.73}$	$\frac{.770}{19.56}$	$\frac{.800}{20.32}$
3	$\frac{1.060}{26.92}$	$\frac{.625}{15.88}$	$\frac{.500}{12.70}$	$\frac{.250}{6.35}$	$\frac{.250}{6.35}$	$\frac{.560}{14.22}$	$\frac{.120}{3.05}$	$\frac{.530}{13.46}$	—	—	—
4	$\frac{2.400}{60.96}$	$\frac{.700}{17.78}$	$\frac{.500}{12.70}$	$\frac{.250}{6.35}$	$\frac{.250}{6.35}$	$\frac{1.900}{48.26}$	—	—	$\frac{.300}{7.62}$	$\frac{.800}{20.32}$	$\frac{.800}{20.32}$

OUTLINE	M	N	WT. OZ. (G)
1	—	#4-40 UNC-2B X .250 (6.35) DEEP 4 HOLES BOTH SIDES	3.0 (85)
2	—	#4-40 UNC-2B X .250 (6.35) DEEP 4 HOLES BOTH SIDES	2.0 (57)
3	#2-56 UNC-2B X .120 (3.05) DEEP	—	1.0 (28)
4	—	#4-40 UNC-2B X .250 (6.35) DEEP 4 HOLES BOTH SIDES	2.0 (57)

- NOTES:
1. Tolerance on 3 place decimals $\pm .020(.51)$ except as noted.
 2. Dimensions in inches over mm.
 3. All weights are nominal.

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