



Section 4-4: Cross-guide Directional Coupler

www.3jmicrowave.com Frequency Coverage: 18 to 110 GHz

Applications:

- Instrumentation
- Module Assembly

Features:

- Low Insertion Loss
- Low Return Loss
- 15, 20, 30 & 40 dB Coupling

Descriptions:

3J Microwave, Inc. offers a complete line of cross-guide couplers in 8 waveguide bands. The coupling level is designed at 15, 20, 30 and 40 dB, which can be chosen to fit in various applications. The slit block



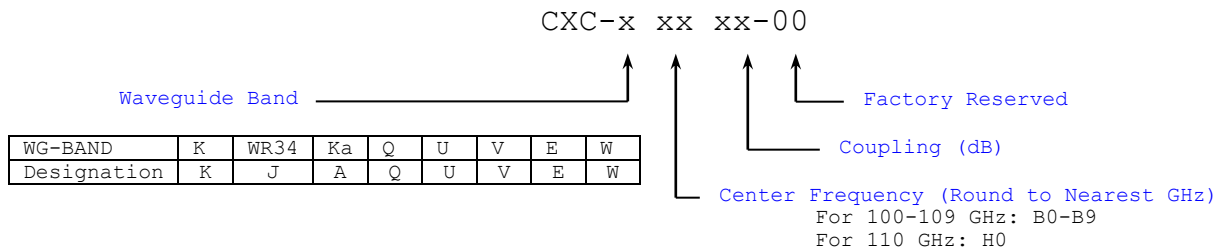
structure is used for the cross-guide couplers. They are suitable for instrumentations and module assemblies. The cross-guide couplers are sorted in category of **CXC** series cross-guide couplers.

CXC Series Cross-guide Coupler Specifications:

Model No.	CXC-xxxxxx-00*							
WG Band	WR-42	WR-34	WR-28	WR-22	WR-19	WR15	WR-12	WR-10
Frequency Range (GHz)	18 to 26.5	22 to 33	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110
Band Width (GHz)	25% of the waveguide Band							
Coupling (dB)	15, 20, 30 & 40							
Coupling Flatness (dB)	+/-1.5							
I. L. (dB)	0.5	0.6	0.7	0.8	0.8	1.0	1.2	1.5
Directivity (dB)	-15 dB for coupling of 15 and 20 dB -10 dB for coupling of 30 and 40 dB							
Return Loss (dB)	-35 dB for the thru line -30 dB for the secondary line							
WG Flange	UG595/U	UG595/UM	UG599/U	UG383/U	UG383/UM	UG385/U	UG387/U	UD387/UM

* Please see "how to order" for the model number details

How to Order:



Model No. Example:

Model Number of a V-Band 15 dB Cross-guide Coupler at Center Frequency of 62.5 GHz:
CXC-V6315-00

Outlines:

Please see Section 4-11, Page 4-24 for the outlines