


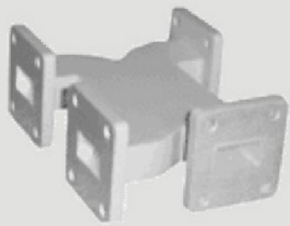



WAVEGUIDE COUPLER

Structural Category

Part No.	Feature	Application	Image
Broadwall Directional Coupler	Full waveguide bandwidth, coupling selection is 2~60dB, the directivity is 40~20dB, coupling flatness is best.	High precision measurement, monitoring and measuring system.	
Crossguide Directional Coupler	20%~100% of waveguide bandwidth, coupling selection is 20~60dB, coupling flatness is better than loop coupler, the directivity is 23~15dB	System monitoring and measurement.	
Waveguide Loop Coupler	20% of waveguide bandwidth, coupling selection is 20~60dB, the directivity is 20~15dB, small size.	Used under 10GHz of waveguide system monitoring and measurement.	
3dB Waveguide Coupler	20% of waveguide bandwidth, coupling selection is 3dB, the output phase difference of two lines is 90 degree.	Power combiner or divider.	
Waveguide Probe Coupler	20% of waveguide bandwidth, coupling selection is 10~60dB, no directivity, smallest size.	Simple system testing.	

Crossguide Directional Coupler



WL+C...c

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Band width	VSWR (Main Line)	vswr (Secondary Line)	Optional Coupling (dB)	Directivity (dB)	Flange	Coupling Output Connector	Dimensions (mm) L*L1*L2	Material
SH-12WL+C...N	WR770	0.96-1.46	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	400*760*250	Al
SH-14WL+C...N	WR650	1.13-1.73	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	320*460*160	Al
SH-18WL+C...N	WR510	1.45-2.20	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	285*510*180	Al
SH-22WL+C...N	WR430	1.72-2.61	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	240*390*140	Al
SH-26WL+C...N	WR340	2.17-3.30	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	190*280*110	Al
SH-32WL+C...N	WR284	2.60-3.95	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	180*275*88	Al
SH-40WL+C...N	WR229	3.22-4.90	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	170*240*90	Al
SH-48WL+C...N	WR187	3.94-5.99	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	137*200*83	Al
SH-58WL+C...N	WR159	4.64-7.05	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	120*170*65	Al
SH-70WL+C...N	WR137	5.38-8.17	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	90*150*60	Al
SH-84WL+C...N	WR112	6.57-9.99	≤20%	≤1.10	≤1.25	20-60	≥15	FBP	N Female	82*120*50	Cu
SH-100WL+C...N	WR90	8.2-12.40	≤20%	≤1.10	≤1.25	20-60	≥15	FBP	N Female	70*85*40	Cu
SH-120WL+C...N	WR75	9.84-15.0	≤20%	≤1.10	≤1.25	20-60	≥15	FBP	N Female	60*83*35	Cu
SH-140WL+C...S	WR62	11.9-18.0	≤20%	≤1.10	≤1.25	20-60	≥15	FBP	SMA Female	60*65*30	Cu
SH-180WL+C...S	WR51	14.5-22.0	≤20%	≤1.10	≤1.25	20-60	≥15	FBP	SMA Female	60*70*30	Cu
SH-220WL+C...K	WR42	17.6-26.7	≤20%	≤1.10	≤1.50	20-60	≥15	FBP	2.92 Female	65*54*30	Cu
SH-260WL+C...K	WR34	21.7-33.0	≤20%	≤1.10	≤1.50	20-60	≥15	FBP	2.92 Female	60*50*25	Cu
SH-320WL+C...K	WR28	26.5-40.0	≤20%	≤1.10	≤1.50	20-60	≥15	FBP	2.92 Female	42*50*20	Cu



Crossguide Directional Coupler

Product Type	WL+C...c	WL+C...	W+C...	WL+CB...c
Schematic				
WG Type	WR975-WR28	WR975-WR10	WR975-WR10	WR975-WR28
Working Bandwidth	F0+10%	F0+10%	F0+10%	F0+10%
Optional Coupling...(dB)	20-60	20-60	20-60	20-60
Coupling Accuracy(dB)	+0.5~+1.0	+0.5~+1.0	+0.5~+1.0	+0.5~+1.0
Directivity(dB)	15-20	15-20	15-20	15-20
VSWR(Main Line)	1.10	1.10	1.10	1.10
Coupling Output	N,SMA,2.92	Waveguide	Waveguide	N,SMA,2.92

Waveguide Coupler



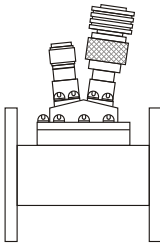
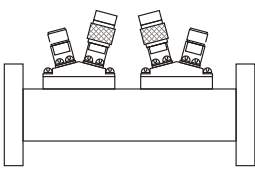
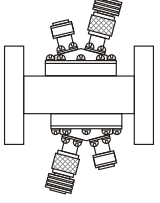
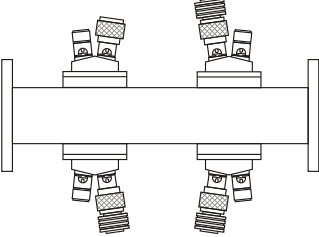
Waveguide Loop Coupler

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Band width	Optional Coupling (dB)	Directivity (dB)	VSWR (Main Line)	VSWR (Secondary Line)	Flange	Connector	Length (mm)	Material
SH-9WHC...N	WR975	0.75-1.15	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	300	Al
SH-12WHC...N	WR770	0.96-1.46	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	200	Al
SH-14WHC...N	WR650	1.13-1.73	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	220	Al
SH-18WHC...N	WR510	1.45-2.20	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	210	Al
SH-22WHC...N	WR430	1.72-2.61	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	160	Al
SH-26WHC...N	WR340	2.17-3.30	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	160	Al
SH-32WHC...N	WR284	2.60-3.95	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	150	Al
SH-40WHC...N	WR229	3.22-4.90	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	130	Al
SH-48WHC...N	WR187	3.94-5.99	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	130	Al
SH-58WHC...N	WR159	4.64-7.05	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	130	Al
SH-70WHC...N	WR137	5.38-8.17	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	130	Al
SH-84WHC...N	WR112	6.57-9.99	≤20%	20-60	≥15	≤1.10	≤1.25	FBP	N Female	130	Cu
SH-100WHC...N	WR90	8.2-12.4	≤20%	20-60	≥15	≤1.10	≤1.25	FBP	N Female	100	Cu



Waveguide Loop Coupler

Description	Loop Coupler	Dual Directional Loop Coupler		Four Directional Loop Coupler
	Model	WHC...c	WHHC...c	WDHC...c
Outline Drawings				
WG Type	WR975-WR28	WR975-WR28	WR975-WR28	WR975-WR28
Working Bandwidth	F0+10%	F0+10%	F0+10%	F0+10%
Optional Coupling..(dB)	20-60	20-60	20-60	20-60
Directivity(dB)	15	15	15	15
VSWR(Main Line)	1.10	1.10	1.10	1.10
VSWR(Secondary Line)	1.25	1.25	1.25	1.25
Connector	N or SMA	N or SMA	N or SMA	N or SMA

Waveguide Coupler



Double-Ridged Waveguide Loop Coupler

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Optional Coupling (dB)	Directivity (dB)	VSWR (Main Line)	VSWR (Secondary Line)	Flange	Connector	Length (mm)	Material
SH-84DRWHC...N	WRD84	0.84-2	20-60	≥ 15	≤ 1.15	≤ 1.60	FP	N Female	300	Al
SH-150DRWHC...N	WRD150	1.5-3.6	20-60	≥ 15	≤ 1.15	≤ 1.60	FP	N Female	200	Al
SH-200DRWHC...N	WRD200	2-4.8	20-60	≥ 15	≤ 1.15	≤ 1.60	FP	N Female	180	Al
SH-250DRWHC...N	WRD250	2.6-7.8	20-60	≥ 15	≤ 1.15	≤ 1.60	FP	N Female	150	Al
SH-350DRWHC...N	WRD350	3.5-8.2	20-60	≥ 15	≤ 1.15	≤ 1.60	FP	N Female	120	Al
SH-475DRWHC...N	WRD475	4.75-11	20-60	≥ 15	≤ 1.15	≤ 1.80	FP	N Female	100	Al
SH-500DRWHC...N	WRD500	5-18	20-60	≥ 15	≤ 1.15	≤ 1.80	FP	N Female	100	Al
SH-580DRWHC...N	WRD580	5.8-16	20-60	≥ 15	≤ 1.15	≤ 1.80	FP	N Female	100	Al
SH-650DRWHC...N	WRD650	6.5-18	20-60	≥ 15	≤ 1.15	≤ 1.80	FP	N Female	100	Al
SH-750DRWHC...N	WRD750	7.5-18	20-60	≥ 15	≤ 1.15	≤ 1.80	FP	N Female	100	Al
SH-700DRWHC...N	WRD700	7-18.5	20-60	≥ 15	≤ 1.15	≤ 1.80	FP	N Female	100	Al
SH-1100DRWHC...N	WRD110	11-26.5	20-60	≥ 15	≤ 1.20	≤ 2.00	FP	SMA Female	80	Cu
SH-1800DRWHC...N	WRD180	18-40	20-60	≥ 15	≤ 1.20	≤ 2.00	FP	SMA Female	80	Cu

Waveguide Coupler

Broadwall Directional Coupler



Product Type	Outline Drawings	WG Type	Working Bandwidth	Optional Coupling dB	Avg Coupling Accuracy(dB)	Coupling Flatness(dB)	Directivity (dB)
Single Directional	 WC	WR975-WR10	Full Band	3-60	$\pm 0.7 - \pm 1.5$	$\pm 0.7 - \pm 1.5$	30-40
	 WC...C	WR975-WR10	Full Band	3-60	$\pm 0.7 - \pm 1.5$	$\pm 0.7 - \pm 1.5$	30-40
Dual Directional	 WDXC	WR975-WR10	Full Band	3-60	$\pm 0.7 - \pm 1.5$	$\pm 0.7 - \pm 1.5$	30-40
	 WDXC...C	WR975-WR10	Full Band	3-60	$\pm 0.7 - \pm 1.5$	$\pm 0.7 - \pm 1.5$	30-40
Dual Directional	 WUC	WR975-WR10	Full Band	3-60	$\pm 0.7 - \pm 1.3$	$\pm 0.5 - \pm 1.8$	30-40
	 WUC...C	WR975-WR10	Full Band	3-60	$\pm 0.7 - \pm 1.3$	$\pm 0.5 - \pm 1.8$	30-40
Other	 WDC WDC...C						
	 WIC WIC...C						
Other	 WXC WXC...C						
	 WYC WYC...C WDUC WDUC...C						

Waveguide Coupler

Broadwall Directional Coupler

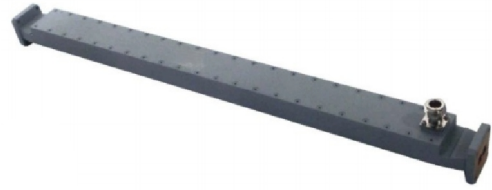


ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Optional Coupling (dB)	Directivity (dB)	VSWR (Main Line)	VSWR (Secondary Line)	Flange	Connector	Material
SH-9WC...N	WR975	0.75-1.15	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-12WC...N	WR770	0.96-1.46	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-14WC...N	WR650	1.13-1.73	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-18WC...N	WR510	1.45-2.20	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-22WC...N	WR430	1.72-2.61	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-26WC...N	WR340	2.17-3.30	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-32WC...N	WR284	2.60-3.95	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-40WC...N	WR229	3.22-4.90	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-48WC...N	WR187	3.94-5.99	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-58WC...N	WR159	4.64-7.05	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-70WC...N	WR137	5.38-8.17	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-84WC...N	WR112	6.57-9.99	3-60	30-40	≤1.10	≤1.25	FBP	N Female	Cu
SH-100WC...N	WR90	8.20-12.40	3-60	30-40	≤1.10	≤1.25	FBP	N Female	Cu
SH-120WC...N	WR75	9.84-15.0	3-60	30-40	≤1.10	≤1.25	FBP	N Female	Cu
SH-140WC...S	WR62	11.9-18.0	3-60	30-40	≤1.10	≤1.25	FBP	SMA Female	Cu
SH-180WC...S	WR51	14.5-22.0	3-60	30-40	≤1.10	≤1.25	FBP	SMA Female	Cu
SH-220WC...K	WR42	17.6-26.7	3-60	30-40	≤1.10	≤1.50	FBP	2.92 Female	Cu
SH-260WC...k	WR34	21.7-33.0	3-60	30-40	≤1.10	≤1.50	FBP	2.92 Female	Cu
SH-320WC...K	WR28	26.5-40.0	3-60	30-40	≤1.10	≤1.50	FBP	2.92 Female	Cu
SH-400WC...	WR22	32.9-50.1	3-60	30-40	≤1.10	≤1.25	FUGP	WR22	Cu
SH-500WC...	WR19	39.2-59.6	3-60	30-40	≤1.10	≤1.25	FUGP	WR19	Cu
SH-620WC...	WR15	49.8-75.8	3-60	30-40	≤1.10	≤1.25	FUGP	WR15	Cu
SH-740WC...	WR12	60.5-91.9	3-60	30-40	≤1.10	≤1.25	FUGP	WR12	Cu
SH-900WC...	WR10	73.8-112	3-60	30-40	≤1.10	≤1.25	FUGP	WR10	Cu

Waveguide Coupler

Double-Ridged Waveguide Broadwall Directional Coupler



ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Optional Coupling (dB)	Coupling Coupling (dB)	Directivity (dB)	VSWR (Main Line)	VSWR (Secondary Line)	Flange	Connector	Material
SH-84DRWC...N	WRD84	0.84-2	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-150DRWC...N	WRD150	1.5-3.6	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-200DRWC...N	WRD200	2-4.8	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-250DRWC...N	WRD250	2.6-7.8	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-350DRWC...N	WRD350	3.5-8.2	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-475DRWC...N	WRD475	4.75-11	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-500DRWC...N	WRD500	5-18	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-580DRWC...N	WRD580	5.8-16	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-650DRWC...N	WRD650	6.5-18	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-750DRWC...N	WRD750	7.5-18	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-700DRWC...N	WRD700	7-18.5	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-1100DRWC...N	WRD110	11-26.5	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	SMA Female	Cu
SH-1800DRWC...N	WRD180	18-40	20-60	± 1.5	≥25	≤1.10	≤1.5	FP	SMA Female	Cu

Waveguide Coupler

Waveguide Probe Coupler



ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Optional Coupling (dB)	Connector	VSWR (Main Line)	Flange	Material
SH-40WTC...N	WR229	3.22-4.90	30-60	N Female	≤1.05	FDP	Al
SH-48WTC...N	WR187	3.94-5.99	30-60	N Female	≤1.05	FDP	Al
SH-58WTC...N	WR159	4.64-7.05	30-60	N Female	≤1.05	FDP	Al
SH-70WTC...N	WR137	5.38-8.17	30-60	N Female	≤1.05	FDP	Al
SH-84WTC...N	WR112	6.57-9.99	30-60	N Female	≤1.05	FBP	Cu
SH-100WTC...N	WR90	8.20-12.40	30-60	N Female	≤1.05	FBP	Cu
SH-120WTC...N	WR75	9.84-15.0	30-60	N Female	≤1.05	FBP	Cu
SH-140WTC...S	WR62	11.9-18.0	30-60	SMA Female	≤1.05	FBP	Cu
SH-180WTC...S	WR51	14.5-22.0	30-60	SMA Female	≤1.05	FBP	Cu
SH-220WTC...K	WR42	17.6-26.7	30-60	2.92 Female	≤1.05	FBP	Cu
SH-260WTC...K	WR34	21.7-33.0	30-60	2.92 Female	≤1.05	FBP	Cu
SH-320WTC...K	WR28	26.5-40.0	30-60	2.92 Female	≤1.05	FBP	Cu

Waveguide Coupler



Circular Waveguide Probe Coupler

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR	Coupling (dB)	Inner Diameter (mm)	Connector	Material	Finish
SH-100CWTC30N	2.0~4.0	≤1.1	30	100	N Female	Al	Chromate Conversion
SH-61.04CWTC30N	3.3~3.8	≤1.1	30	61.04	N Female	Al	Chromate Conversion
SH-5199CWTC30N	3.89~5.33	≤1.1	30	51.99	N Female	Al	Chromate Conversion
SH-37CWTC30N	4.5~6.5	≤1.1	30	37	N Female	Al	Chromate Conversion
SH-27.78CWTC30S	7.4~9.0	≤1.1	30	27.78	SMA Female	Al	Chromate Conversion
SH-23.825CWTC30S	9.1~10.0	≤1.1	30	23.825	SMA Female	Al	Chromate Conversion
SH-20.244CWTC30S	8.5~10.5	≤1.1	30	20.244	SMA Female	Al	Chromate Conversion
SH-14CWTC30S	15.0~17.0	≤1.1	30	14	SMA Female	Cu	Silver Plating
SH-11.25CWTC30S	18.2~24.9	≤1.1	30	11.25	SMA Female	Cu	Silver Plating
SH-11CWTC30S	17.7~21.2	≤1.1	30	11	SMA Female	Cu	Silver Plating
SH-7.137CWTC30S	27.5~31	≤1.1	30	7.137	SMA Female	Cu	Silver Plating

Waveguide Coupler

Waveguide Single Channel Rotary Joint

Model	Type	Product Image	VSWR WOW	IL WOW (dB)	Life Time (20 RPM)
I	I Type		≤ 0.05	≤ 0.05	3×10^6 Revolutions
L	L Type		≤ 0.05	≤ 0.05	3×10^6 Revolutions
U	U Type		≤ 0.05	≤ 0.05	3×10^6 Revolutions