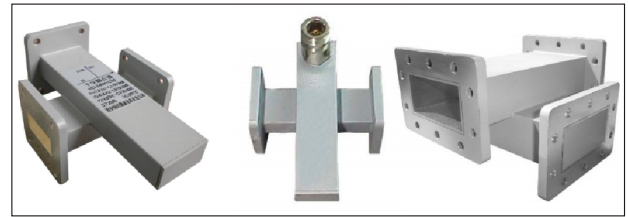


CROSSGUIDE DIRECTIONAL COUPLER

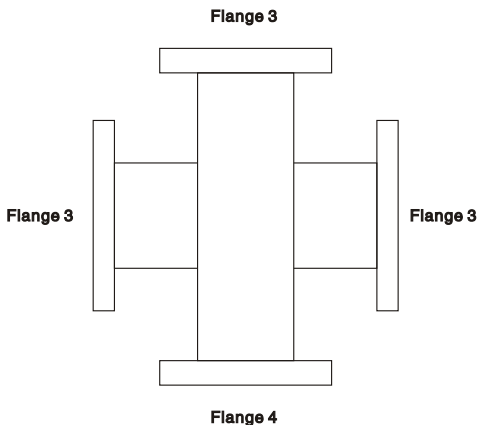
Shinhom Microwave manufactures Crossguide Directional Couplers covering a wide frequency range. Couplers are available in 3 or 4 port configuration. Standard coupling values are 20, 30, 40, 50 and 60 dB, with minimum Directivity of 18 dB. The compactness of crossguide coupler suits many applications where space is at a premium and directivity is not the prime consideration. Models are available with combinations of waveguide and coaxial ports. Special multi-port crossguide couplers can be manufactured to suit customer's special requirements.



ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Operating Bandwidth (%)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	WG Type		Flange	Material
			Main Line	Secondary Line			IEC	EIA		
SH-22W+C...	1.72-2.61	10-20	1.10	1.15	18-60	18	R22	WR430	FDP/FDM	Al/Cu
SH-26W+C...	2.17-3.30	10-20	1.10	1.15	18-60	18	R26	WR340	FDP/FDM	Al/Cu
SH-32W+C...	2.60-3.95	10-20	1.10	1.15	18-60	18	R32	WR284	FDP/FDM	Al/Cu
SH-40W+C...	3.22-4.90	10-20	1.10	1.15	18-60	18	R40	WR229	FDP/FDM	Al/Cu
SH-48W+C...	3.94-5.99	10-20	1.10	1.15	18-60	18	R48	WR187	FDP/FDM	Al/Cu
SH-58W+C...	4.64-7.05	10-20	1.10	1.15	18-60	18	R58	WR159	FDP/FDM	Al/Cu
SH-70W+C...	5.38-8.17	10-20	1.10	1.15	18-60	18	R70	WR137	FDP/FDM	Al/Cu
SH-84W+C...	6.57-9.99	10-20	1.10	1.15	18-60	18	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100W+C...	8.20-12.40	10-20	1.10	1.15	18-60	18	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120W+C...	9.84-15.0	10-20	1.10	1.15	18-60	18	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140W+C...	11.9-18.0	10-20	1.10	1.15	18-60	18	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180W+C...	14.5-22.0	10-20	1.10	1.15	18-60	18	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220W+C...	17.6-26.7	10-20	1.10	1.15	18-60	18	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260W+C...	21.7-33.0	10-20	1.10	1.15	18-60	18	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320W+C...	26.3-40.0	10-20	1.15	1.15	18-60	18	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
 **Typical operating bandwidth of the crossguide coupler is up to 20% of waveguide bandwidth.
 ***Nominal Accuracy: ± 0.7dB
 Frequency Sensitivity: ± 1dB



Ordering Information

Example Part No: SH - 100 W+C 30 P M E M A

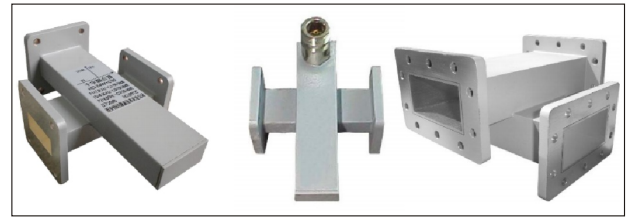
Shinhom Microwave ———
 WG type: R100 ———
 Product Type: Crossguide Directional Coupler (4 W G Ports) ———
 Coupling: C=30dB ———
 Flange 1 Type: FBP100 ———
 Flange 2 Type: FBM100 ———

Material : A=Aluminum
 C=Copper
 Flange 4 Type: FBM100
 Flange 3 Type: FBE100

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

CROSSGUIDE DIRECTIONAL COUPLER

Shinhom Microwave manufactures Crossguide Directional Couplers covering a wide frequency range. Couplers are available in 3 or 4 port configuration. Standard coupling values are 20, 30, 40, 50 and 60 dB, with minimum Directivity of 18 dB. The compactness of crossguide coupler suits many applications where space is at a premium and directivity is not the prime consideration. Models are available with combinations of waveguide and coaxial ports. Special multi-port crossguide couplers can be manufactured to suit customer's special requirements.

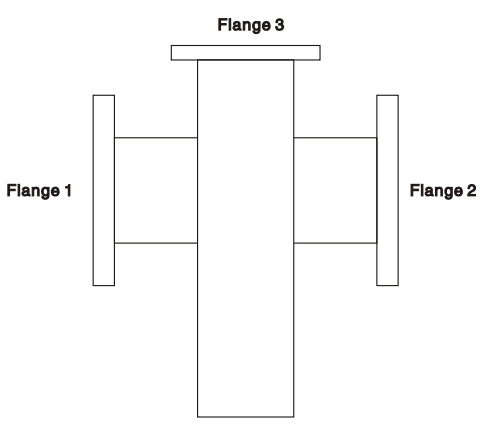


Style 2 – 3 Waveguide Ports

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Operating Bandwidth (%)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	WG Type		Flange	Material
			Main Line	Secondary Line			IEC	EIA		
SH-22WL+C...	1.72-2.61	10-20	1.10	1.15	18-60	18	R22	WR430	FDP/DFM	Al/Cu
SH-26WL+C...	2.17-3.30	10-20	1.10	1.15	18-60	18	R26	WR340	FDP/DFM	Al/Cu
SH-32WL+C...	2.60-3.95	10-20	1.10	1.15	18-60	18	R32	WR284	FDP/DFM	Al/Cu
SH-40WL+C...	3.22-4.90	10-20	1.10	1.15	18-60	18	R40	WR229	FDP/DFM	Al/Cu
SH-48WL+C...	3.94-5.99	10-20	1.10	1.15	18-60	18	R48	WR187	FDP/DFM	Al/Cu
SH-58WL+C...	4.64-7.05	10-20	1.10	1.15	18-60	18	R58	WR159	FDP/DFM	Al/Cu
SH-70WL+C...	5.38-8.17	10-20	1.10	1.15	18-60	18	R70	WR137	FDP/DFM	Al/Cu
SH-84WL+C...	6.57-9.99	10-20	1.10	1.15	18-60	18	R84	WR112	FDP/DFM	Al/Cu
SH-100WL+C...	8.20-12.4	10-20	1.10	1.15	18-60	18	R100	WR90	FDP/DFM	Al/Cu
SH-120WL+C...	9.84-15.0	10-20	1.10	1.15	18-60	18	R120	WR75	FDP/DFM	Al/Cu
SH-140WL+C...	11.9-18.0	10-20	1.10	1.15	18-60	18	R140	WR62	FDP/DFM	Al/Cu
SH-180WL+C...	14.5-22.0	10-20	1.10	1.15	18-60	18	R180	WR51	FDP/DFM	Al/Cu
SH-220WL+C...	17.6-26.7	10-20	1.10	1.15	18-60	18	R220	WR42	FDP/DFM	Al/Cu
SH-260WL+C...	21.7-33.0	10-20	1.10	1.15	18-60	18	R260	WR34	FDP/DFM	Al/Cu
SH-320WL+C...	26.3-40.0	10-20	1.15	1.15	18-60	18	R320	WR28	FDP/DFM	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
 **Typical operating bandwidth of the crossguide coupler is up to 20% of waveguide bandwidth.
 ***Nominal Accuracy: ± 0.7dB
 Frequency Sensitivity: ± 1dB



Ordering Information

Example Part No: SH - 100 WL+C 30 P M E A

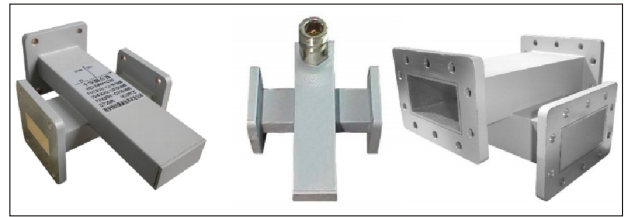
Shinhom Microwave ————
 WG type: R100 ————
 Product Type: Crossguide Directional Coupler (3 W G Ports) ————
 Coupling:C=30dB ————
 Flange 1 Type: FBP100 ————

Material : A=Aluminum
 C=Copper
 Flange 3 Type: FBE100
 Flange 2 Type: FBM100

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

CROSSGUIDE DIRECTIONAL COUPLER

Shinhom Microwave manufactures Crossguide Directional Couplers covering a wide frequency range. Couplers are available in 3 or 4 port configuration. Standard coupling values are 20, 30, 40, 50 and 60 dB, with minimum Directivity of 18 dB. The compactness of crossguide coupler suits many applications where space is at a premium and directivity is not the prime consideration. Models are available with combinations of waveguide and coax ports. Special multi-port crossguide couplers can be manufactured to suit customer's special requirements.



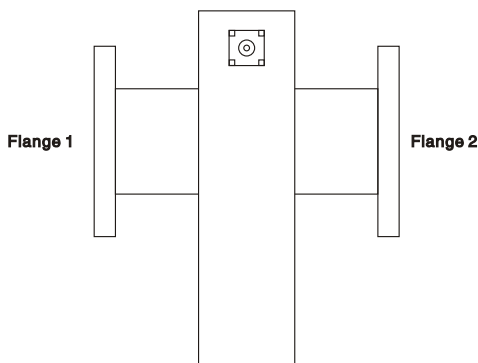
Style 3 - 2 Waveguide Ports, 1 Coax Port

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Operating Bandwidth (%)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	WG Type		Flange	Coax Con	Material
			Main Line	Secondary Line			IEC	EIA			
SH-22WL+C...	1.72-2.61	10-20	1.10	1.25	18-60	18	R22	WR430	FDP/DFM	N	Al/Cu
SH-26WL+C...	2.17-3.30	10-20	1.10	1.25	18-60	18	R26	WR340	FDP/DFM	N	Al/Cu
SH-32WL+C...	2.60-3.95	10-20	1.10	1.25	18-60	18	R32	WR284	FDP/DFM	N	Al/Cu
SH-40WL+C...	3.22-4.90	10-20	1.10	1.25	18-60	18	R40	WR229	FDP/DFM	N	Al/Cu
SH-48WL+C...	3.94-5.99	10-20	1.10	1.25	18-60	18	R48	WR187	FDP/DFM	N	Al/Cu
SH-58WL+C...	4.64-7.05	10-20	1.10	1.25	18-60	18	R58	WR159	FDP/DFM	N	Al/Cu
SH-70WL+C...	5.38-8.17	10-20	1.10	1.25	18-60	18	R70	WR137	FDP/DFM	N	Al/Cu
SH-84WL+C...	6.57-9.99	10-20	1.10	1.25	18-60	18	R84	WR112	FBP/FBM/FBE	N	Al/Cu
SH-100WL+C...	8.20-12.4	10-20	1.10	1.25	18-60	18	R100	WR90	FBP/FBM/FBE	N	Al/Cu
SH-120WL+C...	9.84-15.0	10-20	1.10	1.25	18-60	18	R120	WR75	FBP/FBM/FBE	SMA	Al/Cu
SH-140WL+C...	11.9-18.0	10-20	1.10	1.25	18-60	18	R140	WR62	FBP/FBM/FBE	SMA	Al/Cu
SH-180WL+C...	14.5-22.0	10-20	1.10	1.30	18-60	18	R180	WR51	FBP/FBM/FBE	SMA	Al/Cu
SH-220WL+C...	17.6-26.7	10-20	1.10	1.50	18-60	18	R220	WR42	FBP/FBM/FBE	SMA	Al/Cu
SH-320WL+C...	26.3-40.0	10-20	1.15	1.50	18-60	18	R320	WR28	FBP/FBM/FBE	SMA	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
 **Typical operating bandwidth of the crossguide coupler is up to 20% of waveguide bandwidth.
 ***Nominal Accuracy: ± 0.7dB
 Frequency Sensitivity: ± 1dB

Ordering Information



Example Part No: SH - 100 WL+C 30 N K P M A

Shinhom Microwave
 WG type: R100
 Product Type: Crossguide Directional Coupler (2 W G Ports, 1 Coa x port)
 Coupling: C=30dB
 Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm, 2.4=2.4mm, TNC=TNC

Material : A=Aluminum
 C=Copper
 Flange 2 Type: FBM100
 Flange 1 Type: FBP100
 J=Male, K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

BROADWALL DIRECTIONAL COUPLER

Shinhom Microwave manufactures a standard product line of multi-hole broadwall directional couplers covering a wide frequency range. The optimum electrical characteristics of high directivity and coupling flatness are achieved utilizing a precision machined Tchebyscheff coupling hole distribution and a precision ground tapered load element in the secondary arm. Directional couplers are typically used for power sampling, frequency monitoring, especially in the test setups where power reflection measurements are required. Additional sizes and special configurations are available on request.



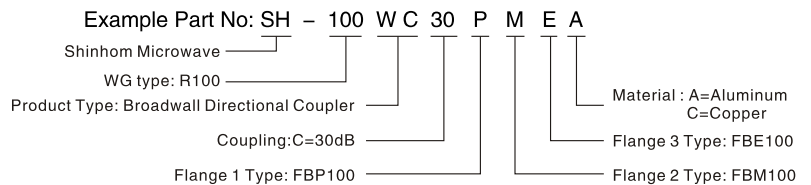
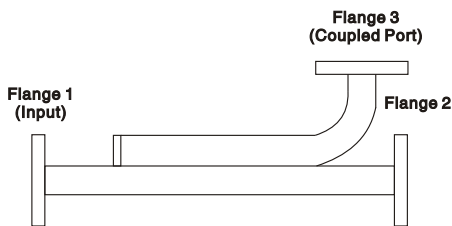
STYLE 1 – 3 WAVEGUIDE PORTS

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	WG Type		Flange	Material
		Main Line	Secondary Line			IEC	EIA		
SH-14WC...	1.13-1.73	1.10	1.15	3-40	20-38	R14	WR650	FDP/FDM	Al/Cu
SH-18WC...	1.45-2.20	1.10	1.15	3-40	20-38	R18	WR510	FDP/FDM	Al/Cu
SH-22WC...	1.72-2.61	1.10	1.15	3-40	20-38	R22	WR430	FDP/FDM	Al/Cu
SH-26WC...	2.17-3.30	1.10	1.15	3-40	20-38	R26	WR340	FDP/FDM	Al/Cu
SH-32WC...	2.60-3.95	1.10	1.15	3-40	20-38	R32	WR284	FDP/FDM	Al/Cu
SH-40WC...	3.22-4.90	1.08	1.12	3-40	20-38	R40	WR229	FDP/FDM	Al/Cu
SH-48WC...	3.94-5.99	1.08	1.12	3-40	20-38	R48	WR187	FDP/FDM	Al/Cu
SH-58WC...	4.64-7.05	1.08	1.12	3-40	20-38	R58	WR159	FDP/FDM	Al/Cu
SH-70WC...	5.38-8.17	1.08	1.12	3-40	20-38	R70	WR137	FDP/FDM	Al/Cu
SH-84WC...	6.57-9.99	1.08	1.12	3-40	20-38	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WC...	8.20-12.40	1.08	1.12	3-40	20-38	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WC...	9.84-15.0	1.08	1.12	3-40	20-38	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WC...	11.9-18.0	1.10	1.15	3-40	20-38	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WC...	14.5-22.0	1.10	1.15	3-40	20-38	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WC...	17.6-26.7	1.10	1.15	3-40	20-38	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WC...	21.7-33.0	1.10	1.15	3-40	20-38	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WC...	26.3-40.0	1.10	1.15	3-40	20-38	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
 **Nominal Accuracy: ± 0.7dB
 Frequency Sensitivity: ± 1dB

Ordering Information



- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

BROADWALL DIRECTIONAL COUPLER

Shinhom Microwave manufactures a standard product line of multi-hole broadwall directional couplers covering a wide frequency range. The optimum electrical characteristics of high directivity and coupling flatness are achieved utilizing a precision machined Tchebyscheff coupling hole distribution and a precision ground tapered load element in the secondary arm. Directional couplers are typically used for power sampling, frequency monitoring, especially in the test setups where power reflection measurements are required. Additional sizes and special configurations are available on request.



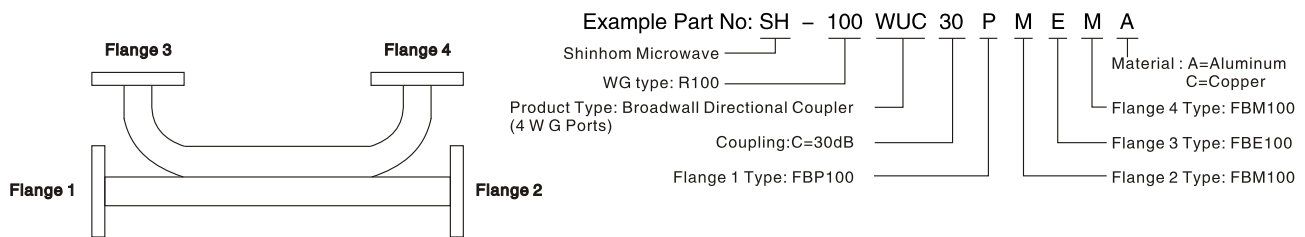
STYLE 2 – 4 WAVEGUIDE PORTS

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	WG Type		Flange	Material
		Main Line	Secondary Line			IEC	EIA		
SH-26WUC...	2.17-3.30	1.10	1.15	3-40	20-38	R26	WR340	FDP/FDM	Al/Cu
SH-32WUC...	2.60-3.95	1.10	1.15	3-40	20-38	R32	WR284	FDP/FDM	Al/Cu
SH-40WUC...	3.22-4.90	1.08	1.12	3-40	20-38	R40	WR229	FDP/FDM	Al/Cu
SH-48WUC...	3.94-5.99	1.08	1.12	3-40	20-38	R48	WR187	FDP/FDM	Al/Cu
SH-58WUC...	4.64-7.05	1.08	1.12	3-40	20-38	R58	WR159	FDP/FDM	Al/Cu
SH-70WUC...	5.38-8.17	1.08	1.12	3-40	20-38	R70	WR137	FDP/FDM	Al/Cu
SH-84WUC...	6.57-9.99	1.08	1.12	3-40	20-38	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WUC...	8.20-12.40	1.08	1.12	3-40	20-38	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WUC...	9.84-15.0	1.08	1.12	3-40	20-38	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WUC...	11.9-18.0	1.10	1.15	3-40	20-38	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WUC...	14.5-22.0	1.10	1.15	3-40	20-38	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WUC...	17.6-26.7	1.10	1.15	3-40	20-38	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WUC...	21.7-33.0	1.10	1.15	3-40	20-38	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WUC...	26.3-40.0	1.10	1.15	3-40	20-38	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
 **Nominal Accuracy: ± 0.7dB
 Frequency Sensitivity: ± 1dB

Ordering Information



- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

BROADWALL DIRECTIONAL COUPLER

Shinhom Microwave manufactures a standard product line of multi-hole broadwall directional couplers covering a wide frequency range. The optimum electrical characteristics of high directivity and coupling flatness are achieved utilizing a precision machined Tchebyscheff coupling hole distribution and a precision ground tapered load element in the secondary arm. Directional couplers are typically used for power sampling, frequency monitoring, especially in the test setups where power reflection measurements are required. Additional sizes and special configurations are available on request.

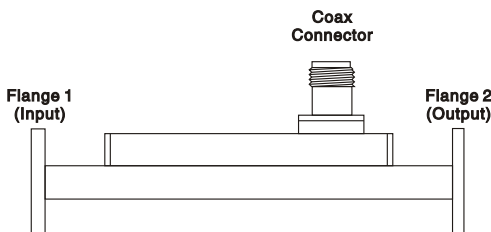


STYLE 3 – 2 WAVEGUIDE PORTS, 1 COAX PORT

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	Coax Connector	WG Type		Flange	Material
		Main Line	Secondary Line				IEC	EIA		
SH-14WC...N	1.13-1.73	1.10	1.25	3-40	20-38	N	R14	WR650	FDP/FDM	Al/Cu
SH-18WC...N	1.45-2.20	1.10	1.25	3-40	20-38	N	R18	WR510	FDP/FDM	Al/Cu
SH-22WC...N	1.72-2.61	1.10	1.25	3-40	20-38	N	R22	WR430	FDP/FDM	Al/Cu
SH-26WC...N	2.17-3.30	1.10	1.25	3-40	20-38	N	R26	WR340	FDP/FDM	Al/Cu
SH-32WC...N	2.60-3.95	1.10	1.25	3-40	20-38	N	R32	WR284	FDP/FDM	Al/Cu
SH-40WC...N	3.22-4.90	1.08	1.25	3-40	20-38	N	R40	WR229	FDP/FDM	Al/Cu
SH-48WC...N	3.94-5.99	1.08	1.25	3-40	20-38	N	R48	WR187	FDP/FDM	Al/Cu
SH-58WC...N	4.64-7.05	1.08	1.25	3-40	20-38	N	R58	WR159	FDP/FDM	Al/Cu
SH-70WC...N	5.38-8.17	1.08	1.25	3-40	20-38	N	R70	WR137	FDP/FDM	Al/Cu
SH-84WC...N	6.57-9.99	1.08	1.25	3-40	20-38	N	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WC...N	8.20-12.40	1.08	1.25	3-40	20-38	N	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WC...S	9.84-15.0	1.08	1.25	3-40	20-38	N	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WC...S	11.9-18.0	1.10	1.25	3-40	20-38	N	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WC...S	14.5-22.0	1.10	1.25	3-40	20-38	N	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WC...S	17.6-26.7	1.10	1.25	3-40	20-38	N	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WC...S	21.7-33.0	1.10	1.25	3-40	20-38	N	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WC...S	26.3-40.0	1.10	1.25	3-40	20-38	N	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
 **Nominal Accuracy: ± 0.7dB
 Frequency Sensitivity: ± 1 dB
 *** These units are supplied with 2.92mm (K-type) connectors.



Ordering Information

Example Part No: SH - 100 W C 30 N K P M A

Shinhom Microwave ————
 WG type: R100 ————
 Product Type: Broadwall Directional Coupler (2 W G Ports, 1 Coax Port) ————
 Coupling: C=30dB ————
 Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm, 2.4=2.4mm, TNC=TNC ————
 Material : A=Aluminum, C=Copper ————
 Flange 2 Type: FBM100 ————
 Flange 1 Type: FBP100 ————
 J=Male, K=Female ————

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

BROADWALL DIRECTIONAL COUPLER

Shinhom Microwave manufactures a standard product line of multi-hole broadwall directional couplers covering a wide frequency range. The optimum electrical characteristics of high directivity and coupling flatness are achieved utilizing a precision machined Tchebyscheff coupling hole distribution and a precision ground tapered load element in the secondary arm. Directional couplers are typically used for power sampling, frequency monitoring, especially in the test setups where power reflection measurements are required. Additional sizes and special configurations are available on request.

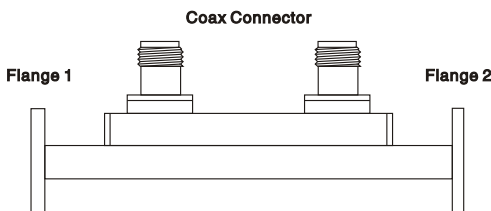


STYLE 4 – 2 WAVEGUIDE PORTS, 2 COAX PORTS

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	Coax Connector	WG Type		Flange	Material
		Main Line	Secondary Line				IEC	EIA		
SH-14WUC...N	1.13-1.73	1.10	1.25	3-40	20-25	N	R14	WR650	FDP/FDM	Al/Cu
SH-18WUC...N	1.45-2.20	1.10	1.25	3-40	20-25	N	R18	WR510	FDP/FDM	Al/Cu
SH-22WUC...N	1.72-2.61	1.10	1.25	3-40	20-25	N	R22	WR430	FDP/FDM	Al/Cu
SH-26WUC...N	2.17-3.30	1.10	1.25	3-40	20-25	N	R26	WR340	FDP/FDM	Al/Cu
SH-32WUC...N	2.60-3.95	1.10	1.25	3-40	20-25	N	R32	WR284	FDP/FDM	Al/Cu
SH-40WUC...N	3.22-4.90	1.08	1.25	3-40	20-25	N	R40	WR229	FDP/FDM	Al/Cu
SH-48WUC...N	3.94-5.99	1.08	1.25	3-40	20-25	N	R48	WR187	FDP/FDM	Al/Cu
SH-58WUC...N	4.64-7.05	1.08	1.25	3-40	20-25	N	R58	WR159	FDP/FDM	Al/Cu
SH-70WUC...N	5.38-8.17	1.08	1.25	3-40	20-25	N	R70	WR137	FDP/FDM	Al/Cu
SH-84WUC...N	6.57-9.99	1.08	1.25	3-40	20-25	N	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WUC...N	8.20-12.40	1.08	1.25	3-40	20-25	N	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WUC...S	9.84-15.0	1.08	1.25	3-40	20-25	SMA	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WUC...S	11.9-18.0	1.10	1.25	3-40	20-25	SMA	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WUC...S	14.5-22.0	1.10	1.25	3-40	20-25	SMA	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WUC...S	17.6-26.7	1.10	1.50	3-40	20-25	SMA,K...	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WUC...S	21.7-33.0	1.10	1.60	3-40	20-25	SMA,K...	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WUC...S	26.3-40.0	1.10	1.50	3-40	20-25	SMA,K...	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
 **Nominal Accuracy: ± 0.7dB
 Frequency Sensitivity: ± 1 dB
 *** These units are supplied with 2.92mm (K-type) connectors.



Ordering Information

Example Part No: SH - 100 WUC 30 N K P M A

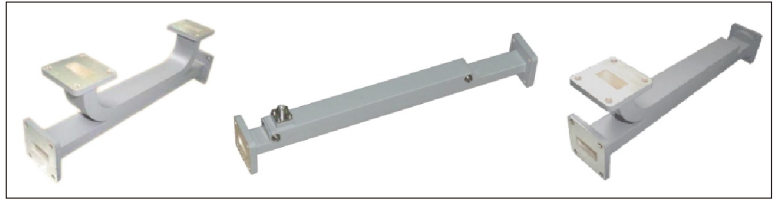
Shinohm Microwave ————
 WG type: R100 ————
 Product Type: Broadwall Directional Coupler (2 W G Ports, 2 Coax Port) ————
 Coupling: C=30dB ————
 Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm, 2.4=2.4mm, TNC=TNC ————

Material : A=Aluminum
 C=Copper
 Flange 2 Type: FBM100
 Flange 1 Type: FBP100
 J=Male, K=Female

- Flange type: Multiple types available – see Shinohm Microwave Flanges page
- Finish: Corrosion protection plus black top coat

BROADWALL DIRECTIONAL COUPLER

Shinhom Microwave manufactures a standard product line of multi-hole broadwall directional couplers covering a wide frequency range. The optimum electrical characteristics of high directivity and coupling flatness are achieved utilizing a precision machined Tchebyscheff coupling hole distribution and a precision ground tapered load element in the secondary arm. Directional couplers are typically used for power sampling, frequency monitoring, especially in the test setups where power reflection measurements are required. Additional sizes and special configurations are available on request.



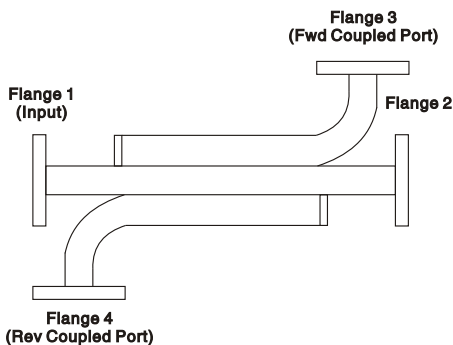
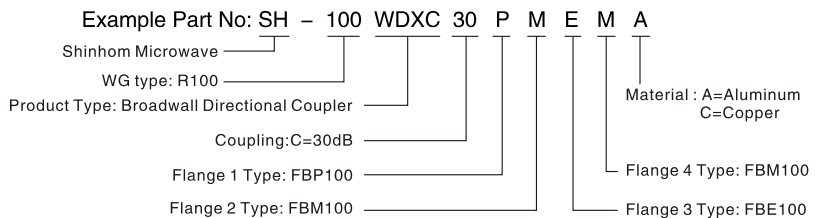
STYLE 5 – DUAL-ARM BROADWALL DIRECTIONAL COUPLER 4 WAVEGUIDE PORTS

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	WG Type		Flange	Material
		Main Line	Secondary Line			IEC	EIA		
SH-26WDXC...	2.17-3.30	1.08	1.12	3-40	20-38	R26	WR340	FDP/FDM	Al/Cu
SH-32WDXC...	2.60-3.95	1.08	1.12	3-40	20-38	R32	WR284	FDP/FDM	Al/Cu
SH-40WDXC...	3.22-4.90	1.08	1.12	3-40	20-38	R40	WR229	FDP/FDM	Al/Cu
SH-48WDXC...	3.94-5.99	1.08	1.12	3-40	20-38	R48	WR187	FDP/FDM	Al/Cu
SH-58WDXC...	4.64-7.05	1.08	1.12	3-40	20-38	R58	WR159	FDP/FDM	Al/Cu
SH-70WDXC...	5.38-8.17	1.08	1.12	3-40	20-38	R70	WR137	FDP/FDM	Al/Cu
SH-84WDXC...	6.57-9.99	1.08	1.12	3-40	20-38	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WDXC...	8.20-12.40	1.08	1.12	3-40	20-38	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WDXC...	9.84-15.0	1.08	1.12	3-40	20-38	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WDXC...	11.9-18.0	1.10	1.12	3-40	20-38	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WDXC...	14.5-22.0	1.10	1.15	3-40	20-38	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WDXC...	17.6-26.7	1.10	1.15	3-40	20-38	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WDXC...	21.7-33.0	1.10	1.15	3-40	20-38	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WDXC...	26.3-40.0	1.10	1.15	3-40	20-38	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
 **Nominal Accuracy: ± 0.7dB
 Frequency Sensitivity: ± 1dB

Ordering Information



- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

BROADWALL DIRECTIONAL COUPLER

Shinhom Microwave manufactures a standard product line of multi-hole broadwall directional couplers covering a wide frequency range. The optimum electrical characteristics of high directivity and coupling flatness are achieved utilizing a precision machined Tchebyscheff coupling hole distribution and a precision ground tapered load element in the secondary arm. Directional couplers are typically used for power sampling, frequency monitoring, especially in the test setups where power reflection measurements are required. Additional sizes and special configurations are available on request.



STYLE 6 – DUAL-ARM BROADWALL DIRECTIONAL COUPLER 2 WAVEGUIDE PORTS, 2 COAX PORTS

ELECTRICAL CHARACTERISTICS:

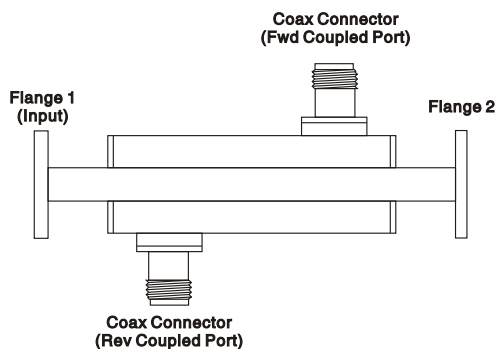
Part No.	Freq Range (GHz)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	Coax Connector	WG Type		Flange	Material
		Main Line	Secondary Line				IEC	EIA		
SH-26WDXC...N	2.17-3.30	1.10	1.25	3-40	20-38	N	R26	WR340	FDP/FDM	Al/Cu
SH-32WDXC...N	2.60-3.95	1.10	1.25	3-40	20-38	N	R32	WR284	FDP/FDM	Al/Cu
SH-40WDXC...N	3.22-4.90	1.08	1.25	3-40	20-38	N	R40	WR229	FDP/FDM	Al/Cu
SH-48WDXC...N	3.94-5.99	1.08	1.25	3-40	20-38	N	R48	WR187	FDP/FDM	Al/Cu
SH-58WDXC...N	4.64-7.05	1.08	1.25	3-40	20-38	N	R58	WR159	FDP/FDM	Al/Cu
SH-70WDXC...N	5.38-8.17	1.08	1.25	3-40	20-38	N	R70	WR137	FDP/FDM	Al/Cu
SH-84WDXC...N	6.57-9.99	1.08	1.25	3-40	20-38	N	R84	WR112	FDP/FDM	Al/Cu
SH-100WDXC...N	8.20-12.40	1.8	1.25	3-40	20-38	N	R100	WR90	FDP/FDM	Al/Cu
SH-120WDXC...N	9.84-15.0	1.08	1.25	3-40	20-38	SMA	R120	WR75	FDP/FDM	Al/Cu
SH-140WDXC...N	11.9-18.0	1.10	1.25	3-40	20-38	SMA	R140	WR62	FDP/FDM	Al/Cu
SH-180WDXC...N	14.5-22.0	1.10	1.25	3-40	20-38	SMA	R180	WR51	FDP/FDM	Al/Cu
SH-220WDXC...N	17.6-26.7	1.10	1.50	3-40	20-38	SMA,K...	R220	WR42	FDP/FDM	Al/Cu
SH-260WDXC...N	21.7-33.0	1.10	1.50	3-40	20-38	SMA,K...	R260	WR34	FDP/FDM	Al/Cu
SH-320WDXC...N	26.3-40.0	1.10	1.50	3-40	20-38	SMA,K...	R320	WR28	FDP/FDM	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.

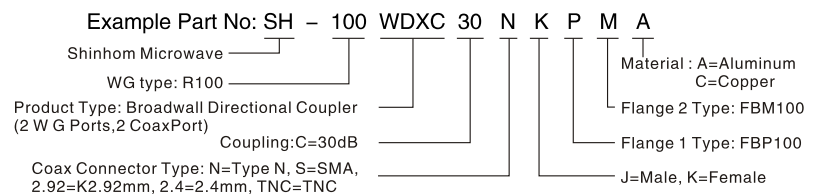
**Nominal Accuracy: ± 0.7dB

Frequency Sensitivity: ± 1 dB

*** These units are supplied with 2.92mm (K-type) connectors.



Ordering Information



- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat