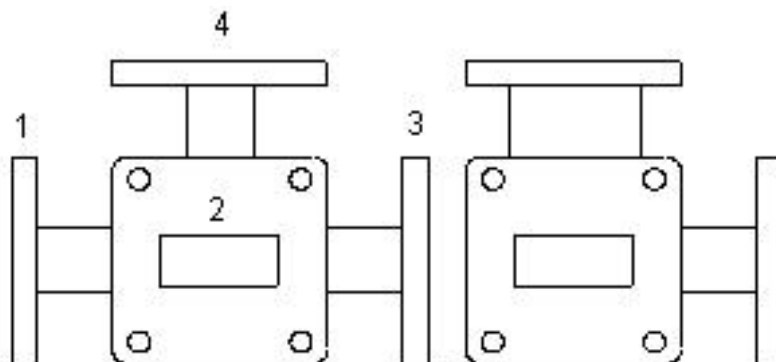


## Waveguide Tee

### ➤ Magic Hybrid Tee

Dolph Microwave's Magic Hybrid Tee is four- port coupler for matching, balance and isolation. E-plane to H-plane Isolation is a function of the symmetry which is carefully balanced on each unit. If the E-plane port 4 or the H-plane port 2 are used as inputs the split is on the output collinear ports 1 and 3. When the input is E plane port4 the outputs are out of phase 180 deg. When the input is H plane port 2 the outputs are in phase. The in-phase and equal amplitude signals inputting into two collinear ports can result combined signals at H-plane port and cancel signal at E-plane port. This feature is widely used in monopulse antenna feeds structure and phasing testing setup.



### ● Specifications

Model No*	Freq Range (GHz)	Operating Bandwidth (%)**	VSWR (Max)		Isolation (H&E Arms) (dB)	Unbalance (Max) (dB)	WG Type		Flange	Material
			H-Arm	E-Arm			IEC	EIA		
DH-3WMT...	0.32-0.49	10-15	1.30	1.50	35	±0.25	R3	WR2300	FDP/FDM	Al
DH-4WMT...	0.35-0.53	10-15	1.30	1.50	35	±0.25	R4	WR2100	FDP/FDM	Al
DH-5WMT...	0.41-0.62	10-15	1.30	1.50	35	±0.25	R5	WR1800	FDP/FDM	All

DH-6WMT...	0.49-0.75	10-15	1.30	1.50	35	±0.25	R6	WR1500	FDP/FDM	All
DH-8WMT...	0.64-0.98	10-15	1.30	1.50	35	±0.25	R8	WR1150	FDP/FDM	All
DH-9WMT...	0.75-1.15	10-15	1.30	1.50	35	±0.25	R9	WR975	FDP/FDM	All
DH-12WMT...	0.96-1.46	10-15	1.20	1.50	35	±0.25	R12	WR770	FDP/FDM	All
DH-14WMT...	1.13-1.73	10-15	1.20	1.50	35	±0.25	R14	WR650	FDP/FDM	All
DH-18WMT...	1.45-2.20	10-15	1.20	1.50	35	±0.25	R18	WR510	FDP/FDM	All
DH-22WMT...	1.72-2.61	10-15	1.30	1.50	35	±0.4	R22	WR430	FDP/FDM	Al/Cu
DH-26WMT...	2.17-3.30	10-15	1.30	1.50	35	±0.4	R26	WR340	FDP/FDM	Al/Cu
DH-32WMT...	2.60-3.95	10-15	1.30	1.50	35	±0.4	R32	WR284	FDP/FDM	Al/Cu
DH-40WMT...	3.22-4.90	10-15	1.20	1.30	35	±0.4	R40	WR229	FDP/FDM	Al/Cu
DH-48WMT...	3.94-5.99	10-15	1.20	1.30	35	±0.4	R48	WR187	FDP/FDM	Al/Cu
DH-58WMT...	4.64-7.05	10-15	1.20	1.30	35	±0.4	R58	WR159	FDP/FDM	Al/Cu
DH-70WMT...	5.38-8.17	10-15	1.20	1.30	35	±0.4	R70	WR137	FDP/FDM	Al/Cu
DH-84WMT...	6.57-9.99	10-15	1.20	1.30	35	±0.4	R84	WR112	FBP/FBM/FBE	Al/Cu
DH-100WMT...	8.20-12.4	10-15	1.20	1.30	35	±0.4	R100	WR90	FBP/FBM/FBE	Al/Cu
DH-120WMT...	9.84-15.0	10-15	1.20	1.30	35	±0.4	R120	WR75	FBP/FBM/FBE	Al/Cu
DH-140WMT...	11.9-18.0	10-15	1.20	1.30	35	±0.4	R140	WR62	FBP/FBM/FBE	Al/Cu
DH-180WMT...	14.5-22.0	10-15	1.20	1.30	35	±0.4	R180	WR51	FBP/FBM/FBE	Al/Cu
DH-220WMT...	17.6-26.7	10-15	1.20	1.50	30	±0.4	R220	WR42	FBP/FBM/FBE	Al/Cu
DH-260WMT...	21.7-33.0	10-15	1.20	1.50	30	±0.4	R260	WR34	FBP/FBM/FBE	Al/Cu
DH-320WMT...	26.3-40.0	10-15	1.20	1.50	30	±0.4	R320	WR28	FBP/FBM/FBE	Al/Cu
DH-400WMT...	32.9-60.1	5-10	1.50	1.60	20	±0.5	R400	WR22	FUGP	Cu
DH-500WMT...	39.2-59.6	5-10	1.50	1.60	20	±0.5	R500	WR19	FUGP	Cu
DH-620WMT...	49.8-75.8	5-10	1.50	1.60	20	±0.5	R620	WR15	FUGP	Cu
DH-740WMT...	60.5-91.9	5-10	1.50	1.60	20	±0.5	R740	WR12	FUGP	Cu
DH-900WMT...	73.8-112	5-10	1.50	1.60	20	±0.5	R900	WR10	FUGP	Cu

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

*\*\*Typical operating bandwidth of the hybrid tee is up to 20% of waveguide bandwidth. Performance degradation may occur while it covers wider waveguide bandwidth.*

● **Ordering Information**

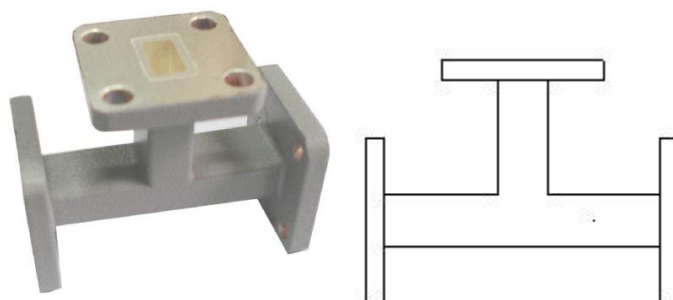
**Example Part No: DH- 100 WMT A**

Dolph Microwave ——— Material: A=Aluminum C=Copper  
 WG Type: R100 ——— Product Type: Magic Hybrid Tee

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

**➤ E-Plane Tee**

Dolph Microwave's manufactures a wide variety of E-Plane Tees. The junction of the auxiliary arm is made on the broad wall of the main waveguide.


**● Specifications**

Model No	Freq Range (GHz)	WG Type		Flange	Material
		IEC	EIA		
DH-3WET	0.32-0.49	R3	WR2300	FDP/FDM	Al
DH-4WET	0.35-0.53	R4	WR2100	FDP/FDM	Al
DH-5WET	0.41-0.62	R5	WR1800	FDP/FDM	Al
DH-6WET	0.49-0.75	R6	WR1500	FDP/FDM	Al
DH-8WET	0.64-0.98	R8	WR1150	FDP/FDM	Al
DH-9WET	0.75-1.15	R9	WR975	FDP/FDM	Al
DH-12WET	0.96-1.46	R12	WR770	FDP/FDM	Al
DH-14WET	1.13-1.73	R14	WR650	FDP/FDM	Al
DH-18WET	1.45-2.20	R18	WR510	FDP/FDM	Al
DH-22WET	1.72-2.61	R22	WR430	FDP/FDM	Al/Cu
DH-26WET	2.17-3.30	R26	WR340	FDP/FDM	Al/Cu

DH-32WET	2.60-3.95	R32	WR284	FDP/FDM	Al/Cu
DH-40WET	3.22-4.90	R40	WR229	FDP/FDM	Al/Cu
DH-48WET	3.94-5.99	R48	WR187	FDP/FDM	Al/Cu
DH-58WET	4.64-7.05	R58	WR159	FDP/FDM	Al/Cu
DH-70WET	5.38-8.17	R70	WR137	FDP/FDM	Al/Cu
DH-84WET	6.57-9.99	R84	WR112	FBP/FBM/FBE	Al/Cu
DH-100WET	8.20-12.4	R100	WR90	FBP/FBM/FBE	Al/Cu
DH-120WET	9.84-15.0	R120	WR75	FBP/FBM/FBE	Al/Cu
DH-140WET	11.9-18.0	R140	WR62	FBP/FBM/FBE	Al/Cu
DH-180WET	14.5-22.0	R180	WR51	FBP/FBM/FBE	Al/Cu
DH-220WET	17.6-26.7	R220	WR42	FBP/FBM/FBE	Al/Cu
DH-260WET	21.7-33.0	R260	WR34	FBP/FBM/FBE	Al/Cu
DH-320WET	26.3-40.0	R320	WR28	FBP/FBM/FBE	Al/Cu
DH-400WET	32.9-60.1	R400	WR22	FUGP	Cu
DH-500WET	39.2-59.6	R500	WR19	FUGP	Cu
DH-620WET	49.8-75.8	R620	WR15	FUGP	Cu
DH-740WET	60.5-91.9	R740	WR12	FUGP	Cu
DH-900WET	73.8-112	R900	WR10	FUGP	Cu

### ● Ordering Information

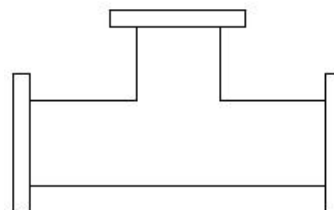
Example Part No: **DH- 100 WET A**



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

### ➤ H-Plane Tee

Dolph Microwave's manufactures a wide variety of H-Plane Tees. The junction of the auxiliary arm is made on the narrow wall of the main waveguide.



● **Specifications**

Model No	Freq Range (GHz)	WG Type		Flange	Material
		IEC	EIA		
DH-3WHT	0.32-0.49	R3	WR2300	FDP/FDM	Al
DH-4WHT	0.35-0.53	R4	WR2100	FDP/FDM	Al
DH-5WHT	0.41-0.62	R5	WR1800	FDP/FDM	Al
DH-6WHT	0.49-0.75	R6	WR1500	FDP/FDM	Al
DH-8WHT	0.64-0.98	R8	WR1150	FDP/FDM	Al
DH-9WHT	0.75-1.15	R9	WR975	FDP/FDM	Al
DH-12WHT	0.96-1.46	R12	WR770	FDP/FDM	Al
DH-14WHT	1.13-1.73	R14	WR650	FDP/FDM	Al
DH-18WHT	1.45-2.20	R18	WR510	FDP/FDM	Al
DH-22WHT	1.72-2.61	R22	WR430	FDP/FDM	Al/Cu
DH-26WHT	2.17-3.30	R26	WR340	FDP/FDM	Al/Cu
DH-32WHT	2.60-3.95	R32	WR284	FDP/FDM	Al/Cu
DH-40WHT	3.22-4.90	R40	WR229	FDP/FDM	Al/Cu
DH-48WHT	3.94-5.99	R48	WR187	FDP/FDM	Al/Cu
DH-58WHT	4.64-7.05	R58	WR159	FDP/FDM	Al/Cu
DH-70WHT	5.38-8.17	R70	WR137	FDP/FDM	Al/Cu
DH-84WHT	6.57-9.99	R84	WR112	FBP/FBM/FBE	Al/Cu
DH-100WHT	8.20-12.4	R100	WR90	FBP/FBM/FBE	Al/Cu
DH-120WHT	9.84-15.0	R120	WR75	FBP/FBM/FBE	Al/Cu
DH-140WHT	11.9-18.0	R140	WR62	FBP/FBM/FBE	Al/Cu
DH-180WHT	14.5-22.0	R180	WR51	FBP/FBM/FBE	Al/Cu
DH-220WHT	17.6-26.7	R220	WR42	FBP/FBM/FBE	Al/Cu
DH-260WHT	21.7-33.0	R260	WR34	FBP/FBM/FBE	Al/Cu

DH-320WHT	26.3-40.0	R320	WR28	FBP/FBM/FBE	Al/Cu
DH-400WHT	32.9-60.1	R400	WR22	FUGP	Cu
DH-500WHT	39.2-59.6	R500	WR19	FUGP	Cu
DH-620WHT	49.8-75.8	R620	WR15	FUGP	Cu
DH-740WHT	60.5-91.9	R740	WR12	FUGP	Cu
DH-900WHT	73.8-112	R900	WR10	FUGP	Cu

● **Ordering Information**

**Example Part No: DH- 100 WHT A**



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