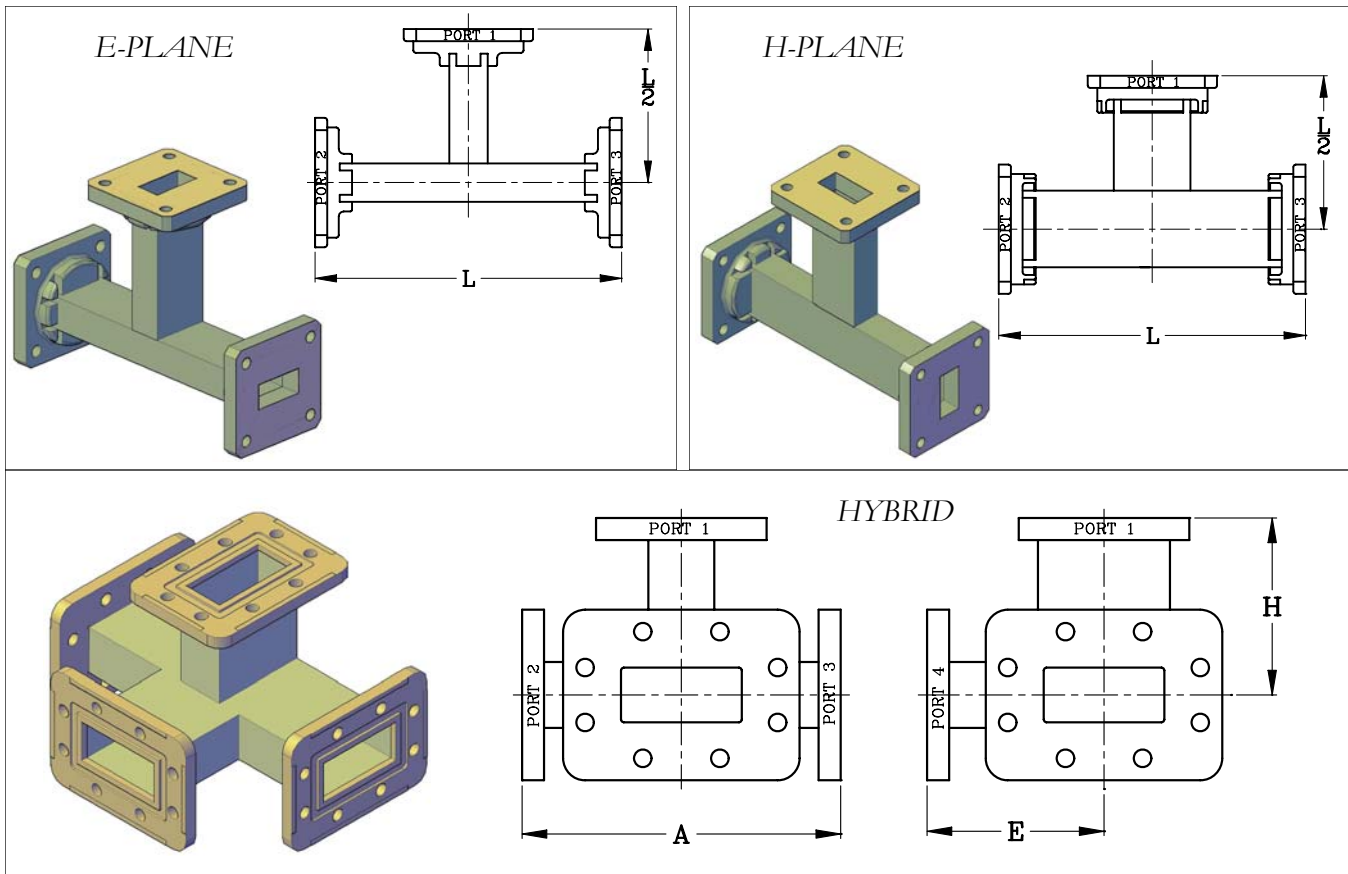


Rectangular Waveguide E-Plane (Series), H-Plane (Shunt), & Hybrid Tees



Space Machine offers a standard product line of waveguide tees covering waveguide sizes WR28 thru WR284. Additional sizes and configurations are available on request. For E and H plane tees please specify whether the tee is to be used as a combiner or divider. Over 20% bandwidth VSWR is 1.2:1 max for all ports, power split is $\pm 0.1\text{dB}$ and collinear arm isolation is 15 dB minimum. For hybrid tees, over 20% bandwidth VSWR is 1.2:1 max for all ports, power split is $\pm 0.1\text{dB}$ and E and H arm isolation is 30dB minimum. See next page for standard dimensions.

Ordering Information:

Waveguide Tee Hybrid, WR137, Bronze, CPRG Flange, Chromated, Paint Space Machine Gray.

Example part number:

<u>Ttt</u>	<u>wr</u>	<u>-m</u>	<u>f</u>	<u>-p</u>	<u>f</u>
THB	137	-B	04	-C	P

Series (TEP): E – Plane Tee
(THP): H – Plane Tee
(THB): Hybrid Tee

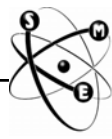
Waveguide Size (wr): WR28 thru WR284

Material (-m): A – Aluminum, B – Bronze, C - OFHC Copper, O – Other

Flange (f): See [Appendix G](#)

Plating (-p): C – Chromate, S – Silver, G – Gold, O – Other, N – None

Finish (f): P – Paint Space Machine Gray, N – None, O – Other



Rectangular Waveguide E-Plane (Series), H-Plane (Shunt), & Hybrid Tees

E and H Plane Tees

Model	WR #	Frequency (GHz)	L	Model	WR #	Frequency (GHz)	L
TxP28-	28	26.50 – 40.00	2.00	TxP102-	102	7.00 – 11.00	4.00
TxP34-	34	22.00 – 33.00	2.00	TxP112-	112	7.05 – 10.00	4.00
TxP42-	42	18.00 – 26.50	2.00	TxP137-	137	5.85 – 8.20	5.00
TxP51-	51	15.00 – 22.00	2.00	TxP159-	159	4.90 – 7.05	6.00
TxP62-	62	12.40 – 18.00	3.00	TxP187-	187	3.95 – 5.85	7.00
TxP75-	75	10.00 – 15.00	3.00	TxP229-	229	3.30 – 4.90	8.00
TxP90-	90	8.20 – 12.40	4.00	TxP284-	284	2.60 – 3.95	9.00

Hybrid Tees

Model	WR #	Frequency (GHz)	A	E	H	Model	WR #	Frequency (GHz)	A	E	H
THB28-	28	26.50 – 40.00	2.25	1.25	1.25	THB112-	112	7.05 – 10.00	3.75	2.00	2.00
THB34-	34	22.00 – 33.00	2.25	1.25	1.25	THB137-	137	5.85 – 8.20	5.25	2.75	2.75
THB42-	42	18.00 – 26.50	2.25	1.25	1.25	THB159-	159	4.90 – 7.05	5.75	3.00	3.00
THB51-	51	15.00 – 22.00	2.75	1.50	1.50	THB187-	187	3.95 – 5.85	6.25	3.25	3.25
THB62-	62	12.40 – 18.00	2.75	1.50	1.50	THB229-	229	3.30 – 4.90	8.25	4.25	4.25
THB75-	75	10.00 – 15.00	2.75	1.50	1.50	THB284-	284	2.60 – 3.95	10.25	5.25	5.25
THB90-	90	8.20 – 12.40	3.25	1.75	1.75						