

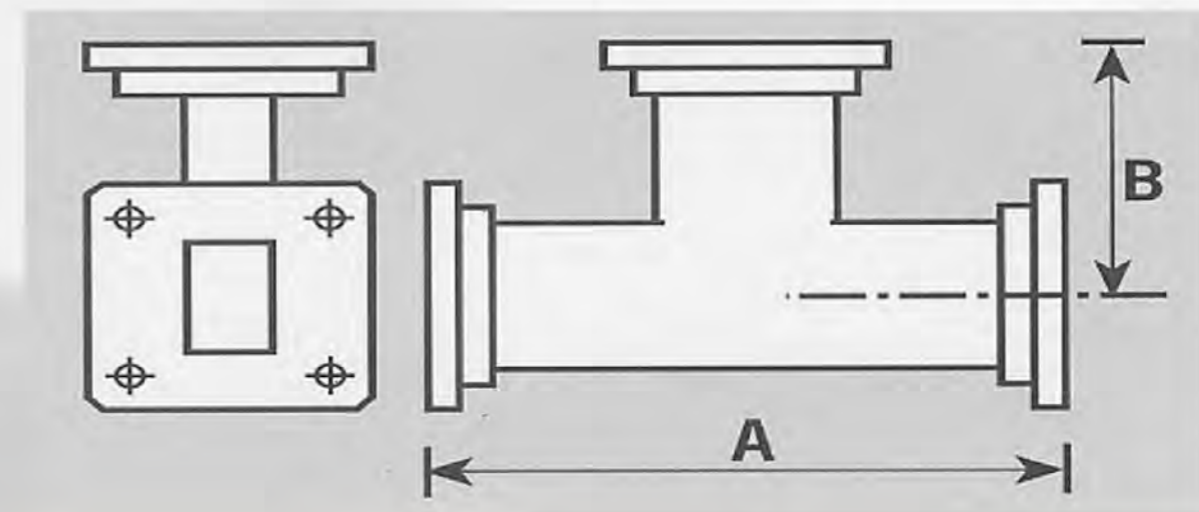
# WAVEGUIDE TEE JUNCTIONS

## TEE JUNCTIONS "E" & "H" PLANE (UNMATCHED)

### Standard Rectangular

Specification:

|           |  |
|-----------|--|
| Material: | Brass or Aluminum  |
| Finish:   | Blue Paint, Silver Plated,<br>Chromated / Iridites Flanges |



### E Plane

| Operating Frequency Band (GHz) | Waveguide Designation |       |           | PART NUMBER           | Dimension (mm) |     |
|--------------------------------|-----------------------|-------|-----------|-----------------------|----------------|-----|
|                                | UK WG                 | IEC R | E.I.A. WR |                       | 'A'            | 'B' |
| 2.60 – 3.95                    | 10                    | 32    | 284       | WT 10 –SQB- (**)-B-E  | 279            | 139 |
| 3.30 – 4.90                    | 11A                   | 40    | 229       | WT 11A –SQB- (**)-B-E | 228            | 114 |
| 3.95 – 5.85                    | 12                    | 48    | 187       | WT 12 –SQB- (**)-B-E  | 139            | 70  |
| 4.90 – 7.05                    | 13                    | 58    | 159       | WT 13 –SQB- (**)-B-E  | 130            | 65  |
| 5.85 – 8.20                    | 14                    | 70    | 137       | WT 14 –SQB- (**)-B-E  | 114            | 57  |
| 7.05 – 10.0                    | 15                    | 84    | 112       | WT 15 –SQB- (**)-B-E  | 89             | 44  |
| 8.20 – 12.40                   | 16                    | 100   | 90        | WT 16 –SQB- (**)-B-E  | 95             | 47  |
| 10.0 – 15.0                    | 17                    | 120   | 75        | WT 17 –SQB- (**)-B-E  | 76             | 38  |
| 12.4 – 18.0                    | 18                    | 140   | 62        | WT 18 –SQB- (**)-B-E  | 76             | 38  |
| 18.0 – 26.5                    | 20                    | 220   | 42        | WT 20 –SQB- (**)-B-E  | 70             | 35  |
| 26.5 – 40.0                    | 22                    | 320   | 28        | WT 22 –SQB- (**)-B-E  | 70             | 35  |

\*\*\* For 3 Digit Rectangular Flange part number, refer to the Flange Catalogue, or consult the factory.

### H Plane

| Operating Frequency Band (GHz) | Waveguide Designation |       |           | PART NUMBER           | Dimension (mm) |     |
|--------------------------------|-----------------------|-------|-----------|-----------------------|----------------|-----|
|                                | UK WG                 | IEC R | E.I.A. WR |                       | 'A'            | 'B' |
| 2.60 – 3.95                    | 10                    | 32    | 284       | WT 10 –SQB- (**)-B-H  | 279            | 139 |
| 3.30 – 4.90                    | 11A                   | 40    | 229       | WT 11A –SQB- (**)-B-H | 228            | 114 |
| 3.95 – 5.85                    | 12                    | 48    | 187       | WT 12 –SQB- (**)-B-H  | 139            | 70  |
| 4.90 – 7.05                    | 13                    | 58    | 159       | WT 13 –SQB- (**)-B-H  | 130            | 65  |
| 5.85 – 8.20                    | 14                    | 70    | 137       | WT 14 –SQB- (**)-B-H  | 114            | 57  |
| 7.05 – 10.0                    | 15                    | 84    | 112       | WT 15 –SQB- (**)-B-H  | 89             | 44  |
| 8.20 – 12.40                   | 16                    | 100   | 90        | WT 16 –SQB- (**)-B-H  | 95             | 47  |
| 10.0 – 15.0                    | 17                    | 120   | 75        | WT 17 –SQB- (**)-B-H  | 76             | 38  |
| 12.4 – 18.0                    | 18                    | 140   | 62        | WT 18 –SQB- (**)-B-H  | 76             | 38  |
| 18.00 – 22.00                  | 19                    | 180   | 51        | WT 19 –SQB- (**)-B-H  | 76             | 38  |
| 18.0 – 26.5                    | 20                    | 220   | 42        | WT 20 –SQB- (**)-B-H  | 70             | 35  |
| 22.00 – 33.00                  | 21                    | 320   | 28        | WT 21 –SQB- (**)-B-H  | 70             | 35  |
| 26.5 – 40.0                    | 22                    | 320   | 28        | WT 22 –SQB- (**)-B-H  | 70             | 35  |

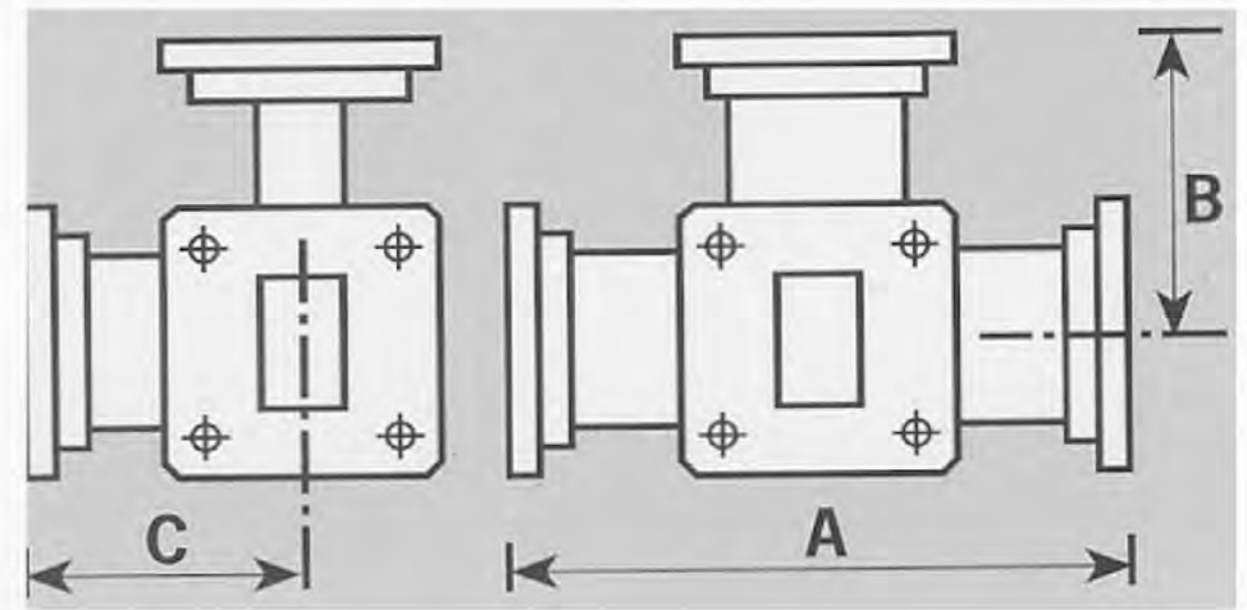
\*\*\* For 3 Digit Rectangular Flange part number, refer to the Flange Catalogue, or consult the factory.

# MAGIC TEE JUNCTIONS (NARROW BAND)

## Standard Rectangular

|                |   |
|----------------|---|
| Specification: | V.S.W.R. and Isolation as shown below                     |
| Material:      | Brass or Aluminum   |
| Finish:        | Blue Paint, Silver Plated<br>Chromated / Iridited Flanges |

Full band designs are not available; each design may be optimized to suit a 10% approx bandwidth within the following frequency ranges. Please advise specific frequency band when ordering.



| Operating Frequency Band (GHz) | Waveguide Designation |       |           | PART NUMBER         | V.S.W.R | Isolation Min |      | Dimension (mm) |     |     |
|--------------------------------|-----------------------|-------|-----------|---------------------|---------|---------------|------|----------------|-----|-----|
|                                | UK WG                 | IEC R | E.I.A. WR |                     |         | E-H Plane     | Thru | 'A'            | 'B' | 'C' |
| 2.60 - 3.95                    | 10                    | 32    | 284       | MT 10 -SQB- (**)-B  | 1.90    | 18            | 35   | 279            | 139 | 120 |
| 3.7 - 4.2                      | 11A                   | 40    | 229       | MT 11A -SQB- (**)-B | 1.35    | 20            | 35   | 228            | 114 | 114 |
| 4.9 - 5.5                      | 12                    | 48    | 187       | MT 12 -SQB- (**)-B  | 1.90    | 18            | 38   | 139            | 70  | 57  |
| 5.85 - 8.2                     | 14                    | 70    | 137       | MT 14 -SQB- (**)-B  | 1.65    | 35            | 16   | 114            | 57  | 57  |
| 7.05 - 10.00                   | 15                    | 84    | 112       | MT 15 -SQB- (**)-B  | 1.45    | 35            | 15   | 89             | 44  | 44  |
| 8.2 - 12.40                    | 16                    | 100   | 90        | MT 16 -SQB- (**)-B  | 1.40    | 33            | 19   | 76             | 38  | 38  |
| 10.7 - 11.7                    | 17                    | 120   | 75        | MT 17 -SQB- (**)-B  | 1.40    | 33            | 19   | 76             | 38  | 38  |
| 12.4 - 18.00                   | 18                    | 140   | 62        | MT 18 -SQB- (**)-B  | 1.50    | 32            | 19   | 70             | 35  | 35  |
| 17.7 - 26.5                    | 20                    | 220   | 42        | MT 20 -SQB- (**)-B  | 1.65    | 30            | 21   | 51             | 25  | 35  |
| 37 - 40                        | 22                    | 320   | 28        | MT 22 -SQB- (**)-B  | 1.65    | 30            | 15   | 47             | 24  | 35  |
| 32.0 - 35.0                    | 22                    | 320   | 28        | MT 22 -SQB- (**)-B  | 1.65    | 30            | 15   | 47             | 24  | 35  |

\*\*\* For 3 Digit Rectangular Flange part number, refer to the Flange Catalogue, or consult the factory.



**WAVEGUIDE SIZE**  
USE THE BRITISH WG SIZE FOR RECTANGULAR

**PRODUCT CODE**  
MT= MAGIC TEE  
WT= 'E' or 'H' WAVEGUIDE TEE

**TYPE**  
S = STANDARD

**PAINT**  
Q = PAINTED (NOT AVAILABLE ON MAGIC TEES  
WG17 - WG22)

**FINISH**  
Z = UNPLATED (OPTIONAL NON-STANDARD)  
A = TIN (OPTIONAL NON-STANDARD)  
B = SILVER (STANDARD)  
H = CHROMATE  
F = IRIDITE

**FLANGE TYPE**  
SELECT THE REQUIRED FLANGE BY SELECTING THE LAST 3 DIGITS OF THE FLANGE PART No.  
E.g. 402= UBR FLANGE

**MATERIAL**  
A= ALUMINIUM  
B= BRASS

**'E' or 'H' TEE**  
E= 'E' TEE  
H= 'H' TEE  
NOT APPLICABLE TO MAGIC TEE

**Notes:**  
1) The flange should be brass to remain standard.

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