

## FEATURES

- ❖ Rugged waveguide configuration
- ❖ Full band operation
- ❖ High performance

## APPLICATIONS

- ❖ Test benches
- ❖ Subsystems
- ❖ Prototypes
- ❖ Inter connections



PRC & PTW Series

## DESCRIPTION

**PRC** series rectangular to circular waveguide transitions are offered to cover frequency range of 18 to 110 GHz. These transitions are manufactured with electro-forming technique to ensure high mechanical tolerance and surface smoothness. Typical VSWR for these transitions is 1.05:1. The transitions are used for connecting rectangular waveguide to circular waveguide with minimum loss. The outline drawing for these transitions is WT-E-6.

**PTW** series rectangular waveguide taper transitions are offered to cover frequency range of 18 to 110 GHz. These transitions are manufactured with EDM technique to ensure high mechanical tolerance and ruggedness. Typical VSWR for these transitions is 1.05:1. The transitions are used for smooth transition between different waveguide size with minimum loss. The outline drawing for these transitions is WT-E-6.

## HOW TO ORDER

### Rectangular to circular waveguide transitions

Specify Model Number **PRC - WG DDD -XX** ← Factory Reserve  
Rectangular Waveguide Size      Diameter in Mills

Example: To order a WR-15 to 0.141" diameter rectangular to circular waveguide transition, specify PRC-15141-XX.

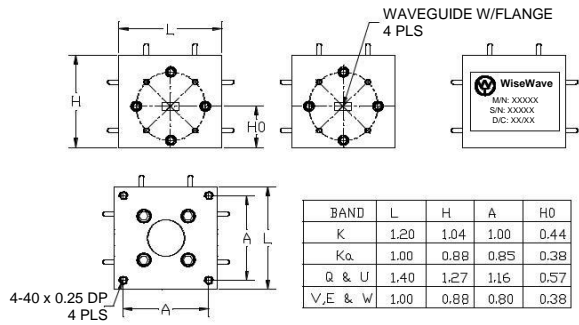
### Rectangular taper transitions

Specify Model Number **PTW - WG WG L - XX** ← Factory Reserve  
Smaller Waveguide Size      Larger Waveguide Size

Example: To order a WR-10 to WR-28 waveguide taper transition, specify PTW-1028L-XX.

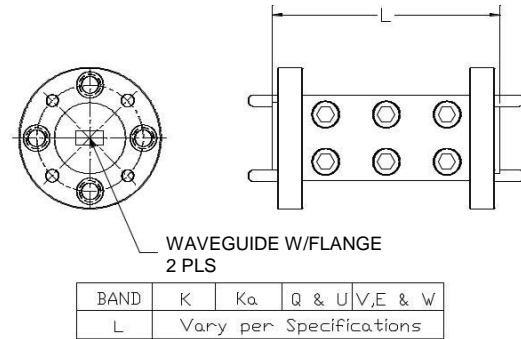
# Passive Component Outline Drawings #1

WT-E-1



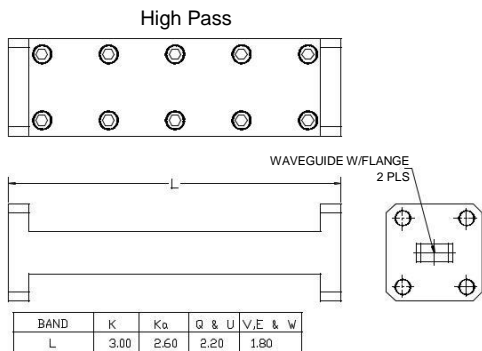
Dimensions are in inches

WT-E-2



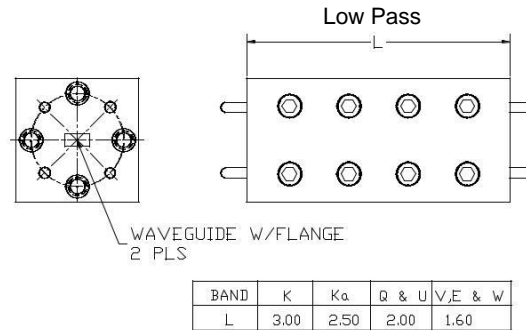
Dimensions are in inches

WT-E-3



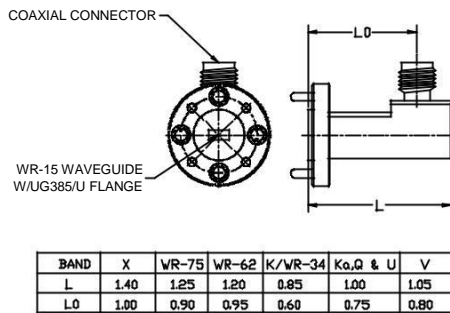
Dimensions are in inches

WT-E-4



Dimensions are in inches

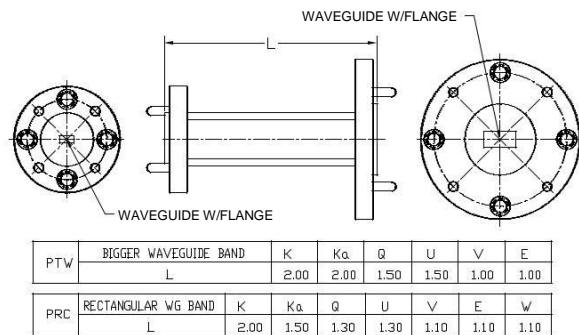
WT-E-5



NOTES:  
BOTH MALE AND FEMALE COAXIAL CONNECTORS ARE AVAILABLE FOR ALL BANDS

Dimensions are in inches

WT-E-6



Dimensions are in inches

The flange pattern shown is for illustration purpose. Refer to Technical Reference Section for flange pattern details. The outline drawings shown are standard versions. Contact factory for your specific package requirements.

# Passive Component Outline Drawings #2

**WT-E-7**

BAND	K	Ka	Q	U	V	E	W
L	1.20	1.00	1.30	1.30	1.00	1.00	1.00
W	1.20	1.00	1.30	1.30	1.00	1.00	1.00
H	1.06	0.90	1.25	1.23	0.83	0.82	0.81

*Dimensions are in inches*

**WT-E-8**

Band	X	VR-75	Ku	K	Ka	Q	U	V	E	W
L	5.46	4.80	4.66	4.24	3.46	3.26	2.66	2.56	2.56	2.46
A	1.73	1.65	1.58	1.52	1.23	1.23	0.98	0.98	0.98	0.98
D	0.45	0.43	0.35	0.21	0.18	0.15	0.13	0.11	0.10	0.09
H	3.46	3.30	3.16	3.04	2.46	2.46	1.96	1.96	1.96	1.96

*Dimensions are in inches*

**WT-E-9**

BAND	Q	U	V	E	W
L	5.50	5.50	3.50	3.50	3.50
W	1.30	1.30	1.00	1.00	1.00
H	1.25	1.23	0.83	0.82	0.81
A	0.80	0.80	0.60	0.60	0.60

*Dimensions are in inches*

**WT-E-10**

Band	X	VR-75	Ku	K	Ka	Q	U	V	E	W
L	19.50	16.50	13.00	11.00	10.00	8.00	6.50	6.00	5.50	5.00
A	1.90	1.85	1.75	1.50	1.40	1.20	1.20	1.00	1.00	1.00
B	0.95	0.95	0.90	0.70	0.60	0.70	0.70	0.60	0.60	0.60
D	0.45	0.43	0.35	0.21	0.18	0.15	0.13	0.11	0.10	0.09

*Dimensions are in inches*

**WT-E-11**

*Dimensions are in inches*

**WT-E-12**

*Dimensions are in inches*

The flange pattern shown is for illustration purpose. Refer to Technical Reference Section for flange pattern details. The outline drawings shown are standard versions. Contact factory for your specific package requirements.