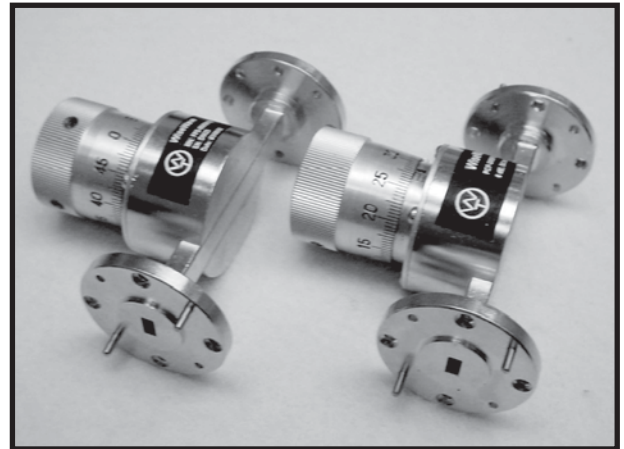


## FEATURES

- ❖ Rugged waveguide configuration
- ❖ Full band operation
- ❖ 0 to 180 ° minimum phase shifting
- ❖ Low cost

## APPLICATIONS

- ❖ Test benches
- ❖ Subsystems
- ❖ Prototypes



CPL Series

## DESCRIPTION

CPL series variable phase shifters are offered for the frequency range of 18 to 110 GHz in seven waveguide bands. The phase shifters utilize low loss dielectric material, which offers minimum insertion loss. The standard phase shifters are equipped with micrometer, which allows fine accurate and repeatable phase settings. The variable phase shifters are typically used in the test setups and prototype assemblies where certain phase shifting is required.

## SPECIFICATIONS

Waveguide Band	K	Ka	Q	U	V	E	W
Model Number	CPL-42-02	CPL-28-02	CPL-22-02	CPL-19-02	CPL-15-02	CPL-12-02	CPL-10-02
Frequency Range (GHz)	18 to 26.5	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110
Waveguide Size	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
Variable Phase Shifting Range (Min)	0 to 180 degrees						
VSWR (Typical)	1.4:1						
Insertion Loss (dB, Typical)	0.4	0.4	0.5	0.6	0.7	0.8	1.0
Power Rating (Maximum)	0.6	0.6	0.5	0.5	0.4	0.3	0.3
Insertion Length (Inches, Typ)	3.94	3.46	3.46	2.46	2.46	2.46	2.46
Outline Drawing	WT-H-II	WT-H-II	WT-H-II	WT-H-2	WT-H-2	WT-H-2	WT-H-2

**Note:** Contact factory for other waveguide bands and specifications.

**WT-H-1**

WAVEGUIDE W/FLANGE  
2 PLS

BAND	W, E & V	U, Q & K <sub>a</sub>	K
L	2.50	3.50	4.00

*Dimensions are in inches*

**WT-H-2**

W, E, V & U BAND

*Dimensions are in inches*

**WT-H-3**

SMA(F) CONNECTOR

CTRL

WAVEGUIDE W/FLANGE  
2 PLS

BAND	W, E & V	U & Q	K <sub>a</sub> & K
L	1.20	1.50	2.00

*Dimensions are in inches*

**WT-H-4**

SMA(F) CONNECTOR

BAND	L	W	H
W, E & V	1.10	1.00	0.75
U & Q	1.20	1.50	1.13
K <sub>a</sub>	1.30	1.80	0.75
K	1.60	2.60	0.88

*Dimensions are in inches*

**WT-H-5**

0.40

0.15

0.20

WR-28 WAVEGUIDE  
WUG599/U FLANGE  
3 PLS

2.56 x 0.25 DP  
4 PLS

-5V TTL +5V

WAVEGUIDE W/FLANGE  
2 PLS

*Dimensions are in inches*

**WT-H-6**

0.80

1.00

1.20

0.40

0.096 DIA x THRU, 4 PLS

TTL

WAVEGUIDE W/FLANGE  
2 PLS

*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.