

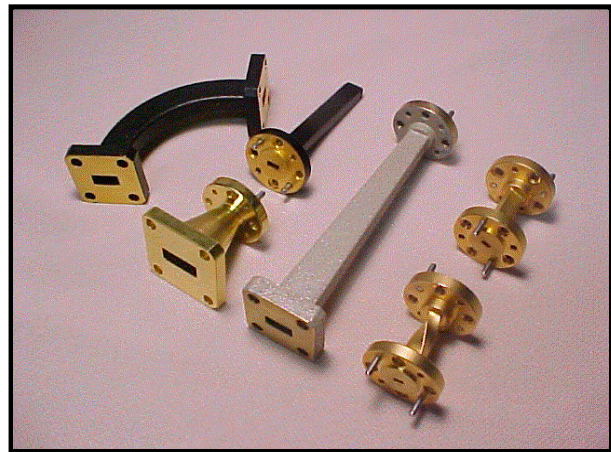
Waveguide Sections, Bends, Twist, Transitions and Loads

FEATURES:

- ❖ Rugged waveguide configuration
- ❖ Full band operation
- ❖ Low cost

APPLICATIONS:

- ❖ Test equipment
- ❖ Subsystems
- ❖ Prototypes



CSS, CWB, CTS, CWW & CWL Series

DESCRIPTION:

Cernex CSS, CWB, CTS, CWW and CWL Series offered various waveguide components line to cover frequency range of 18 to 110 GHz in seven waveguide bands. Other frequency bands are available per request.

Straight waveguide sections (**CSS**) offer the inter-connections between the waveguide ports and are available in 1" to 8" standard length in 1" increments as well as customer-specified lengths.

Waveguide bends (**CWB**) change the direction in the waveguide assembly and are available in H plane and E-plane version with bend angles of 30°, 45°, 60° and 90°.

Waveguide twists (**CTS**) allow changing the orientation of the waveguide port and are available with twisting angles of 45° or 90°.

The tapered waveguide transitions (**CWW**) offer a smooth transition between different waveguide sizes. While linear tapered transition lengths varied from 1.25" to 3", the cosine tapered unit has a very compact size. For example, the length of a WR-42 to WR-10 linear tapered transition is 3", while a cosine taper is 1".

The waveguide termination loads (**CWL**) are useful when a matched port termination is required. The standard termination load offers less than 1.05 VSWR and up to 2.0 watts power handling. Higher power handling versions are offered as custom-specified options.

WAVEGUIDE SPECIFICATIONS:

Waveguide Band	K	Ka	Q	U	V	E	W
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
Flange Pattern	UG595/U	UG599/U	UG383/ U	UG383/U	UG385/U	UG387/U	UG387/U

Note: Contact factory for other waveguide band needs.



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HOW TO ORDER:

- **Straight waveguide sections**

Specify Model Number CSS - WG LL

Waveguide Size _____ _____ Length

↑ ↑

Example: To order a 2" long, WR-15 straight waveguide section, specify CSS-1502.

- **Waveguide bends**

Specify Model Number CWB - WG B DD

Waveguide Size _____ _____ _____ Degrees

Waveguide Size _____ _____ _____ E for E-plane Bend
H for H-plane Bend

↑ ↑ ↑

Example: To order a WR-28, E-plane, 30° waveguide bend, specify CWB-28E30.

- **Waveguide twists**

Specify Model Number CTS - WG LL DD

Waveguide Size _____ _____ _____ Degrees

Waveguide Size _____ _____ _____ Length

↑ ↑ ↑

Example: To order a 45°, 1" long, WR-12 waveguide twist, specify CTS-120145.

- **Tapered waveguide transitions**

Specify Model Number CWW - WG WG T

Waveguide Size _____ _____ _____ L for Linear Taper
C for Cosine Taper
Waveguide Size

↑ ↑ ↑

Example: To order a linear, WR-28 to WR-10 tapered waveguide transition, specify CWW-2810L.

- **Waveguide termination loads**

Specify Model Number CWL - WG

Waveguide Size _____ ↑

Example: To order a WR-42 waveguide termination load, specify CWL-42.