

# **3dB Short Slot Hybrids**

#### FEATURES:

- Small
- Compact
- Negligible Coupling Variation

## APPLICATIONS:

- Waveguide Bridge Circuits
- Balanced Mixers
- Phase Shifters
- Power Splitters

### **DESCRIPTION:**



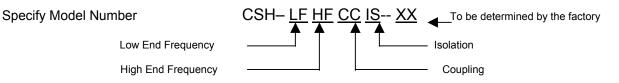
## **CSH Series**

**Cernex's CSH** series short slot hybrid is a narrow wall 3 dB coupler, available in standard waveguide sizes from 18.0 to 110 GHz. This compact, four-port device is inherently matched and well suited for balanced mixers and power splitting circuits. There is a 90-degree phase difference between the output signals, while the fourth port is isolated from the input. Access to the input and output ports of these hybrids is achieved with a special dual-waveguide, single flange arrangement.

## SPECIFICATIONS:

Waveguide Band	Ku	К	Ka	Q	U	V	E	W
Waveguide Size	WR-62	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
Frequency Range (GHz)	12.4 to 18	18 to 26.5	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110
Coupling (dB)	3	3	3	3	3	3	3	3
VSWR max.	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Isolation (dB) Min.	20	20	20	20	20	20	20	18
Bandwidth (%)	6	6	6	6	6	6	6	6

## HOW TO ORDER:



**Example:** To order WR-15 3db short slot hybrid with a frequency band of 50-75Ghz, 3db coupling, and an isolation of 20db, specify CSH-50750320-XX.

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