

Upconverters

FEATURES:

- ❖ Low Driver (Biased)
- ❖ Low Conversion Loss
- ❖ Wide Choice of IF Inputs
- ❖ With or Without RF Filter
- ❖ High Drive (Unbiased) Options



DESCRIPTION:

CUP Series

Cernex's CUP series millimeter wave upconverters use MIC balanced mixers to provide optimum electrical performance throughout the standard product line. Cernex's GaAs beam-lead diode technology means power levels as high as +5 dBm. Low conversion loss specifications ensure efficient upconversion.

SPECIFICATIONS:

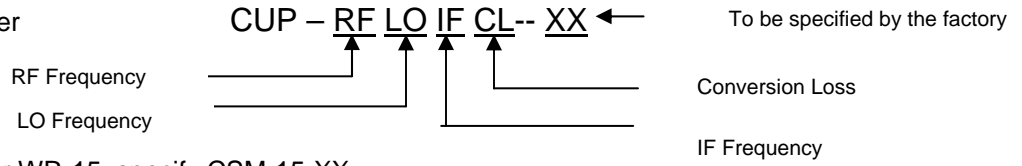
Waveguide Band	K	Ka	Q	U	V	E	W
Waveguide Size	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
Frequency Range (GHz)	18 to 26.5	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110
IF Frequency Range (GHz)	DC to 8.0	DC to 13.5	DC to 17.0	DC to 20.0	DC to 25.0	DC to 30.0	DC to 35.0
Conversion Loss (dB)	7.0	7.5	8.0	10.0	9.0	9.0	9.5
LO Power (dBm)	10 to 13	10 to 13	10 to 13	10 to 13	10 to 13	10 to 13	10 to 13
Port Isolation (dB)	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Bias (V/mA)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Operating Specifications	
RF Bandwidth	Up to Full Bandwidth
Conversion Flatness	±1 dB, Typical
LO Input Power	+20 dBm, Max.
IF Input Power	+20 dBm, Max.
Combined Power	+23 dBm, Max.
RF Output Power	±0 dBm, Typical
LO VSWR	2:1, Typical
IF VSWR	2:1, Typical
LO/RF Isolation	20 dB, Min.
Operating Temperature	-40°C to +70°C



HOW TO ORDER:

Specify Model Number



Example: To order WR-15, specify CSM-15-XX.

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE