

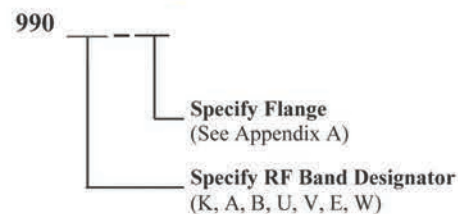
# 990 Series Balanced Phase Detectors



## Features

- High Sensitivity
- Good RF Isolation
- High-Reliability Beam-Lead Diodes

## Ordering Information



Please specify center frequency at time of order.

## Description

Mi-Wave's 990 series balanced phase detectors feature a pair of Schottky diodes that mix or beat two input signals at the same frequency to produce a DC output voltage proportional to the phase difference of the input signals. Matching the two Schottky diodes ensures low DC offset results as well as good port-to-port isolation.

The 990 series phase detectors can be used in applications such as phased-lock loops, phase-encoded systems and phase bridges.

## Technical Specifications

Model Number	990K	990A	990B	990U	990V	990E	990W
Frequency Band (GHz)	18.0-26.5	26.5-40.0	33.0-50.0	40.0-60.0	50.0-75.0	60.0-90.0	75.0-110.0
Waveguide	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
Sensitivity <sup>1</sup> (mV/o), Typ.	4	4	4	3	3	2	2
Bandwidth (%), Typ.	4	4	4	4	4	4	4
RF Isolation (dB), Typ.	20	20	20	20	20	20	20
AM Suppression (dB), Typ.	20	20	20	20	20	20	20

## Typical Transfer Characteristics

