

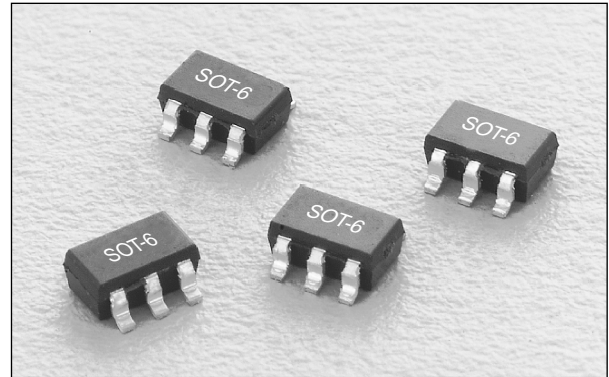
# Two-Way 0° Power Splitter Combiner 1.71–1.99 GHz



PD19-73

## Features

- Low Cost
- Low Profile
- Available in Small SOT-6 Lead Package
- Tape & Reel
- Pin Compatible with PD09-73



## Description

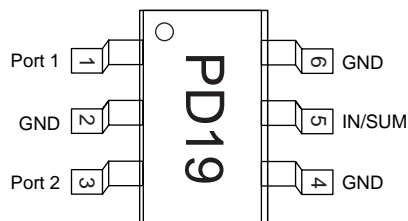
The PD19-73 is a monolithic two-way in-phase hybrid junction tuned for the 1.71–1.99 GHz band. It offers low loss, high isolation, good input/output matching and exceptional phase/amplitude balance. It is available in the SOT-6 lead surface mount package.

The PD19-73 was designed to be pin-to-pin compatible with the PD09-73 Power Splitter/Combiner. This allows similar board layout for Power Splitter/Combiners in the frequency ranges covering 810–960 MHz and 1.7–1.99 GHz. The PD18-73 also covers 1.71–1.99 GHz but with different pin connections.

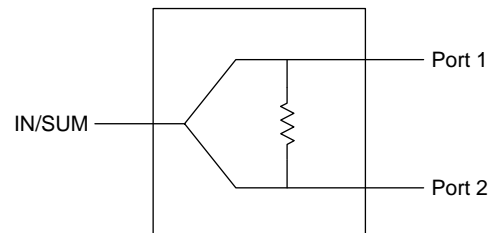
## Electrical Specifications at 25°C

Parameter	Min.	Typ.	Max.	Unit
Frequency	1.71		1.99	GHz
Insertion Loss Less 3 dB Split		0.55	0.70	dB
Isolation	20	25		dB
Input VSWR		1.3:1	1.5:1	
Output VSWR		1.2:1	1.4:1	
Amplitude Balance		±0.1	±0.2	dB
Phase Balance		±1.0	±3.0	Deg.

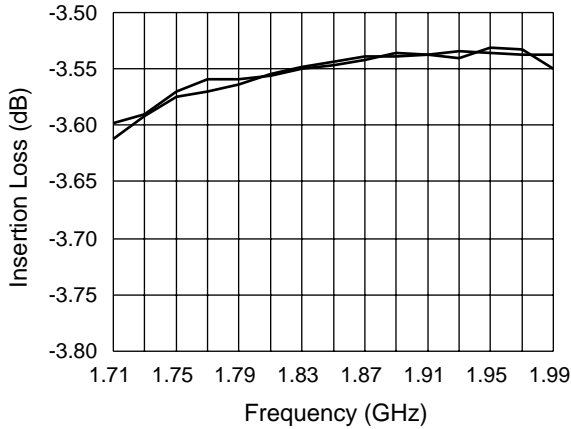
## Pin Out



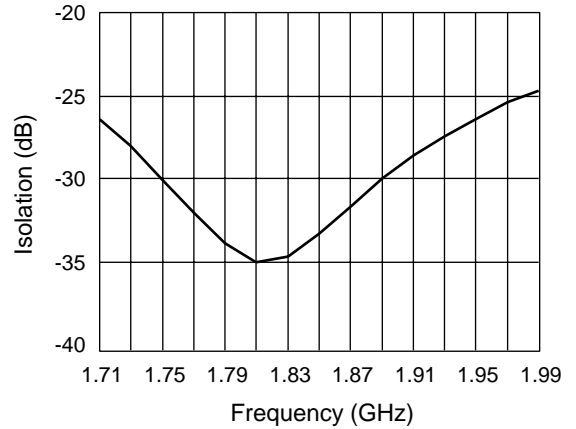
## Block Diagram



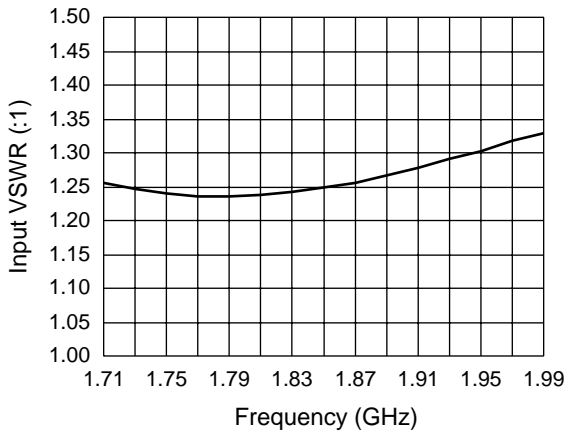
### Typical Performance Data



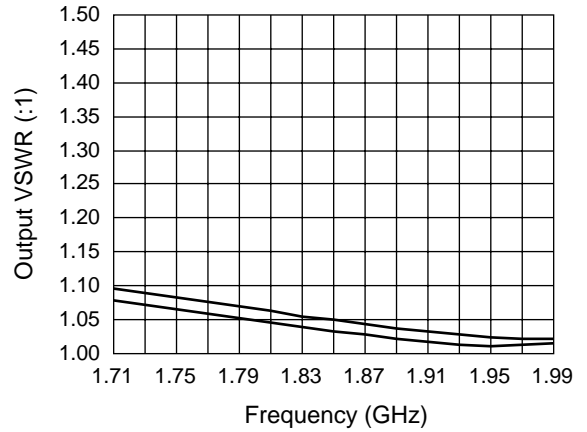
**Insertion Loss vs. Frequency**



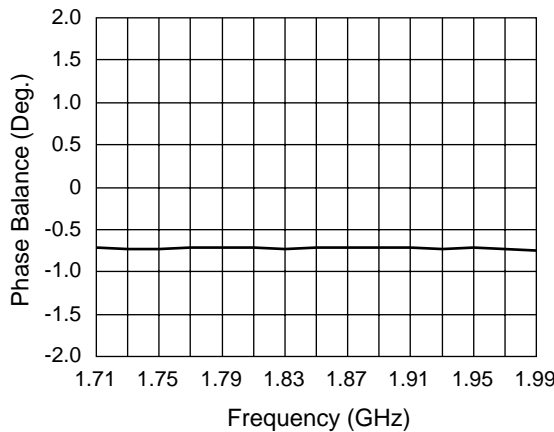
**Isolation vs. Frequency**



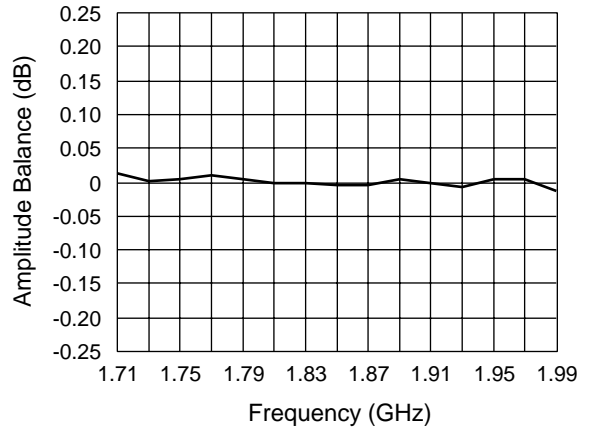
**Input VSWR vs. Frequency**



**Output VSWR vs. Frequency**



**Phase Balance vs. Frequency**



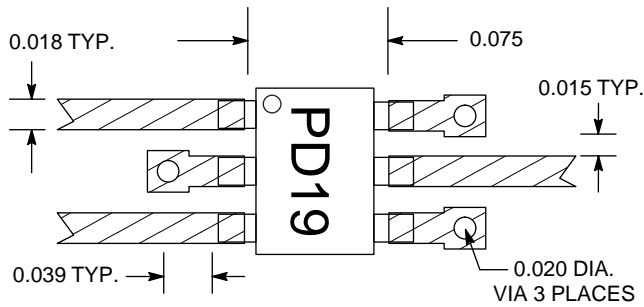
**Amplitude Balance vs. Frequency**

### Absolute Maximum Ratings

Characteristic	Value
Input Power <sup>1</sup>	+1.5 W CW
Input Power <sup>2</sup>	+0.75 CW
Operating Temperature	-40°C to +85°C
Storage Temperature	-65°C to +150°C

1. When used as a power divider with a 2.0:1 maximum VSWR on all ports.
2. When used as a power combiner with a 2.0:1 maximum VSWR on all ports.

### Recommended Board Layout



Material is 10 mil FR4

### SOT-6

