

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



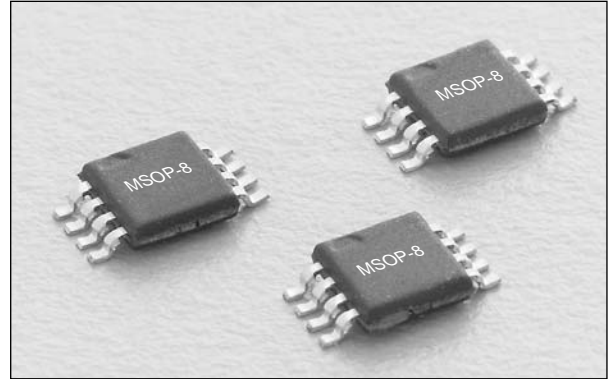
PD4W18-59

## Features

- Low Cost
- Low Profile
- Available in Small MSOP-8 Package
- Tape & Reel

## Description

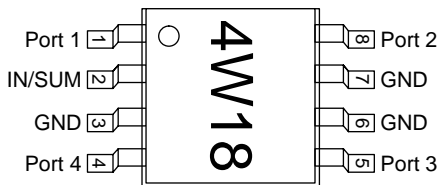
The PD4W18-59 is a monolithic four-way in-phase hybrid junction tuned for the 1.71–1.99 GHz band. It offers low loss, high isolation, good input/output matching and exceptional phase/amplitude balance. It is available in the MSOP-8 leaded surface mount package.



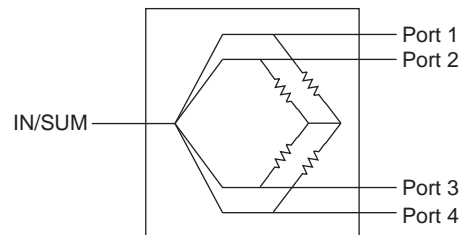
## Electrical Specifications at 25°C

Parameter	Min.	Typ.	Max.	Unit
Frequency	1.71		1.99	GHz
Insertion Loss Less 6 dB Split		0.7	1.2	dB
Isolation	20	25		dB
Input VSWR		1.3:1	1.6:1	
Output VSWR		1.3:1	1.6:1	
Amplitude Balance		±.3	±.4	dB
Phase Balance		±5.0	±8.0	Deg.

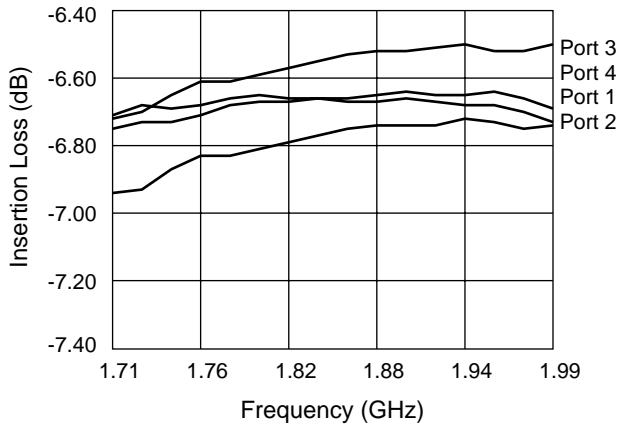
## Pin Out



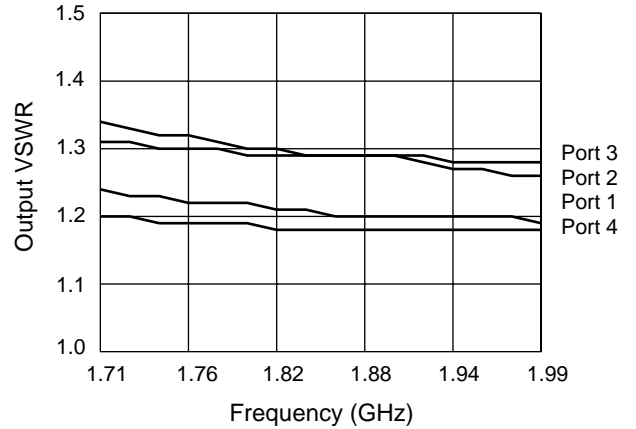
## Block Diagram



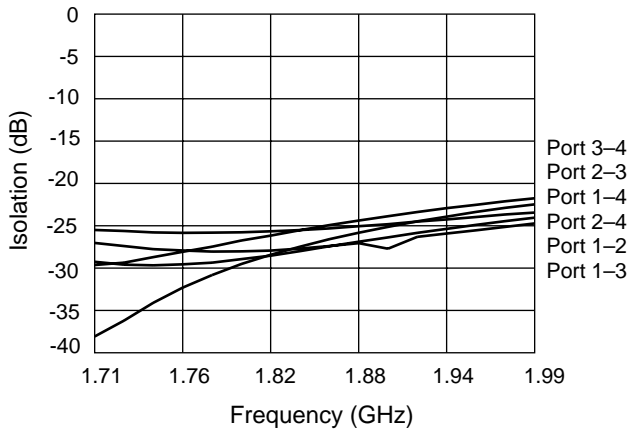
### Typical Performance Data



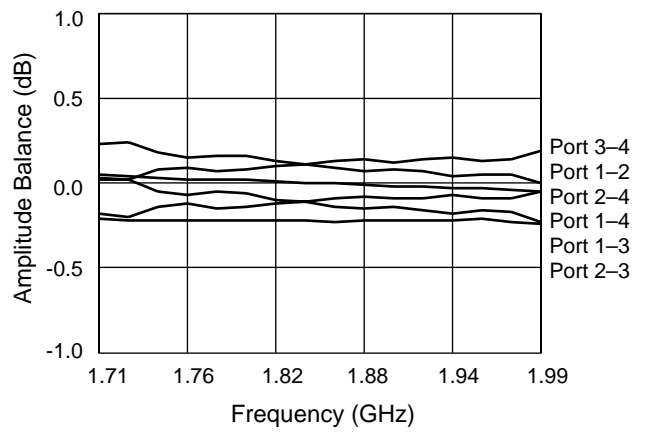
**Insertion Loss vs. Frequency**



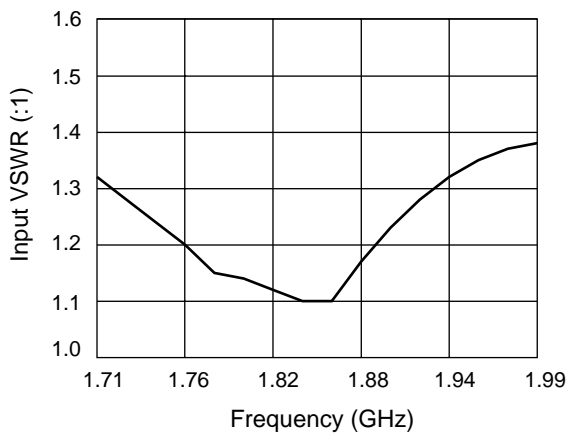
**Output VSWR vs. Frequency**



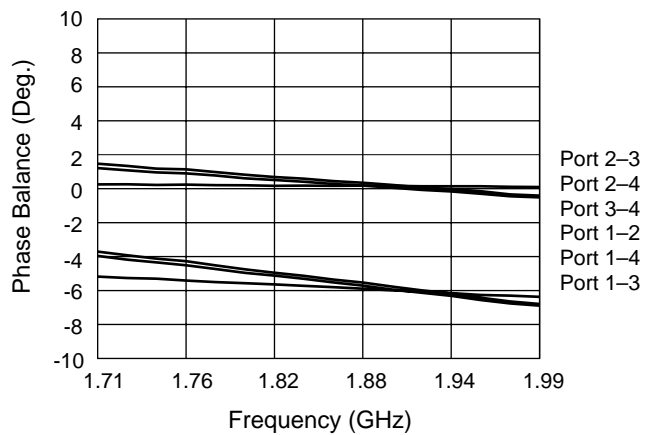
**Isolation vs. Frequency**



**Amplitude Balance vs. Frequency**



**Input VSWR vs. Frequency**



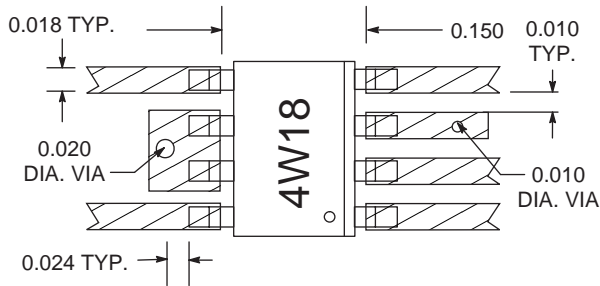
**Phase Balance vs. Frequency**

### Absolute Maximum Ratings

Characteristic	Value
Input Power <sup>1</sup>	+1.5 W CW
Input Power <sup>2</sup>	+0.375 CW
Operating Temperature	-40°C to +85°C
Storage Temperature	-60°C to +150°C

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

### Board Layout



Material is 10 mil FR4

### MSOP-8

