

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

Alpha

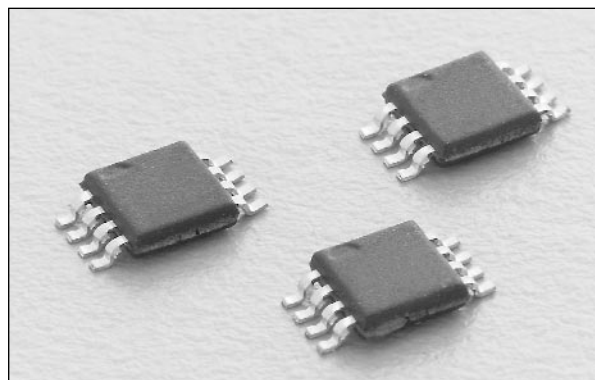
PD4W18-59

Features

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

Description

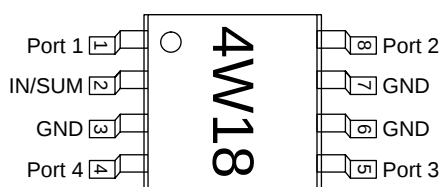
The PD4W18-59 is a monolithic four-way in-phase hybrid junction tuned for the 1.71–1.99 GHz band. It offers low loss, high isolation, good input/output matching and exceptional phase/amplitude balance. It is available in the MSOP-8 lead surface mount package.



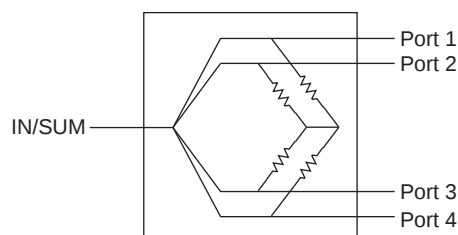
Electrical Specifications at 25°C

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.

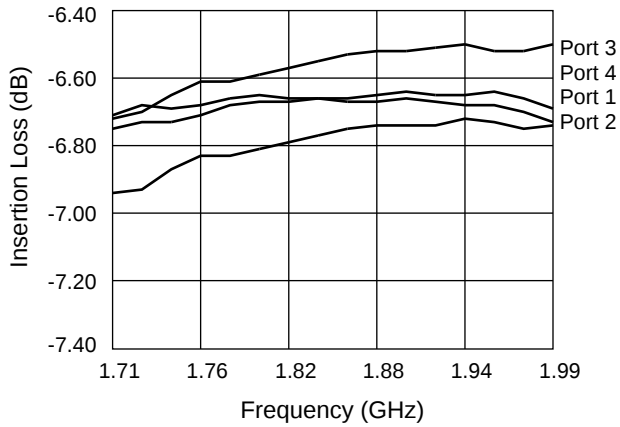
Pin Out



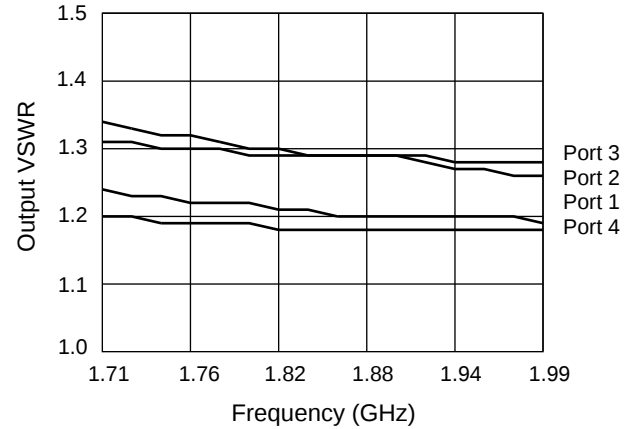
Block Diagram



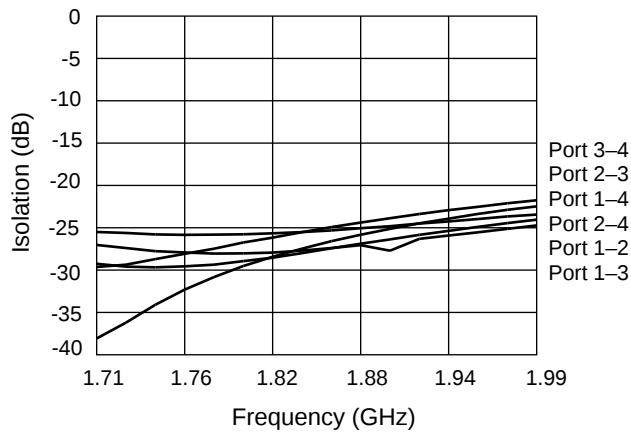
Typical Performance Data



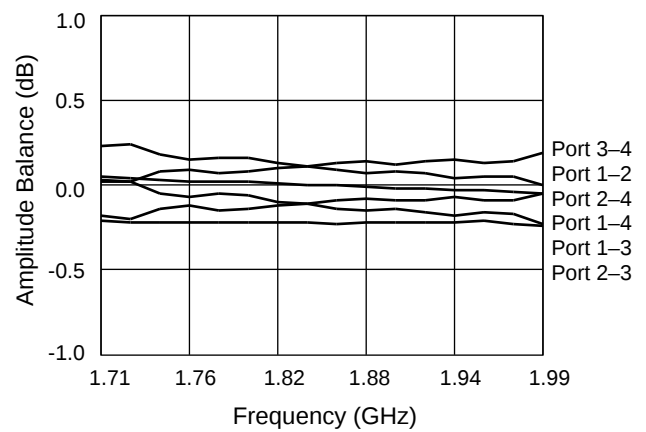
Insertion Loss vs. Frequency



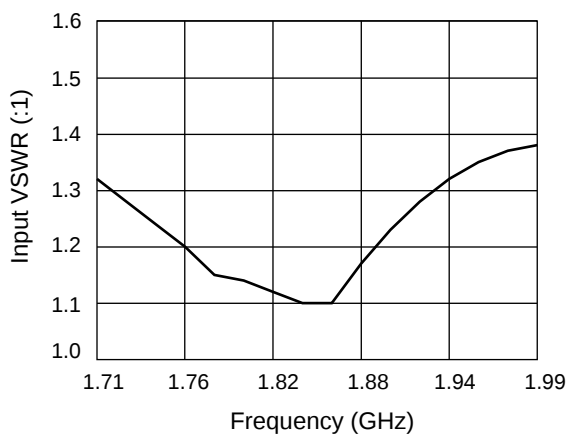
Output VSWR vs. Frequency



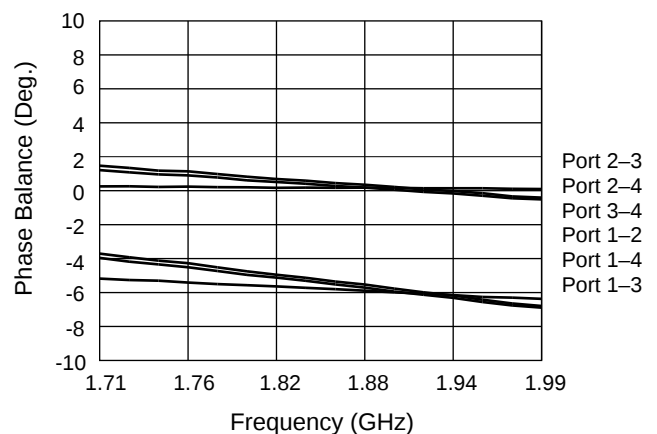
Isolation vs. Frequency



Amplitude Balance vs. Frequency



Input VSWR vs. Frequency



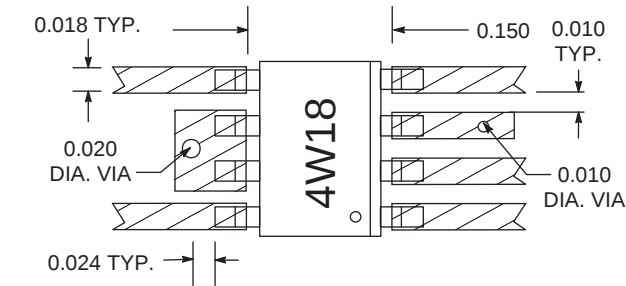
Phase Balance vs. Frequency

Absolute Maximum Ratings

Characteristic	Value
Input Power ¹	+1.5 W CW
Input Power ²	+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

