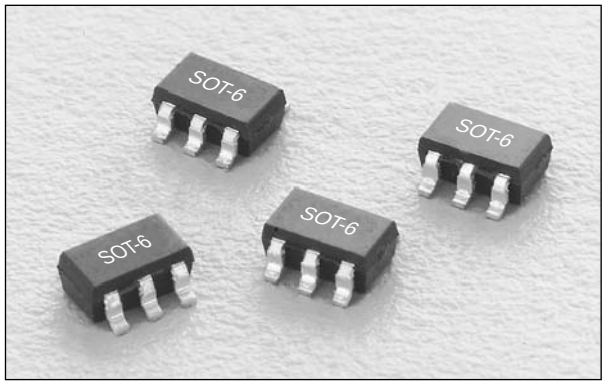
Two-Way 0° Power Splitter Combiner 1.42–1.66 GHz

PD16-73

Features

- Low Cost
- Low Profile
- Available in Small SOT-6 Lead Package
- Tape & Reel
- Footprint Consistent with Other Parts in the "PD" Series



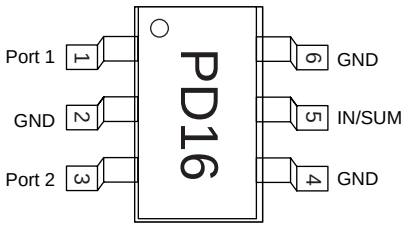
Description

The PD16-73 is a monolithic two-way in-phase hybrid junction tuned for the 1.42–1.66 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 footprint of the PD16-73 is the same as the other power dividers in this package style and series to allow for consistent assembly setup.

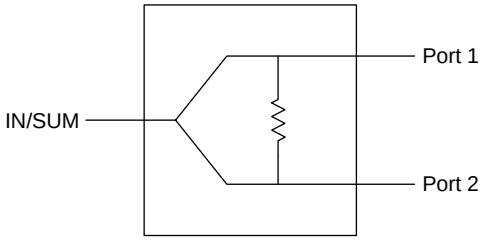
Electrical Specifications at 25°C

Parameter	Min.	Typ.	Max.	Unit
Frequency	1.42		1.66	GHz
Insertion Loss Less 3 dB Split		0.4	0.6	dB
Isolation	18	23		dB
Input VSWR		1.2:1	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.

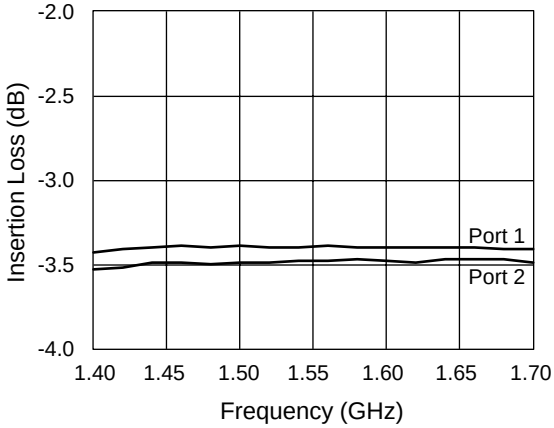
Pin Out



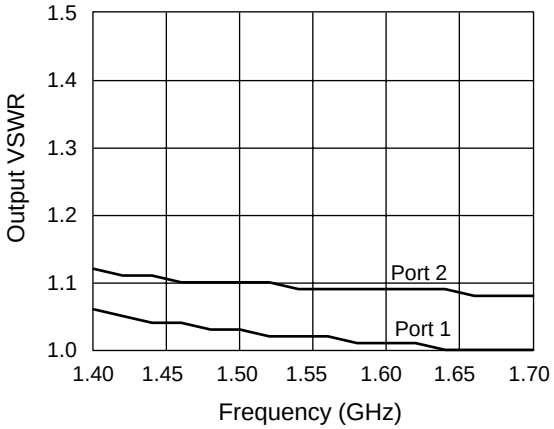
Block Diagram



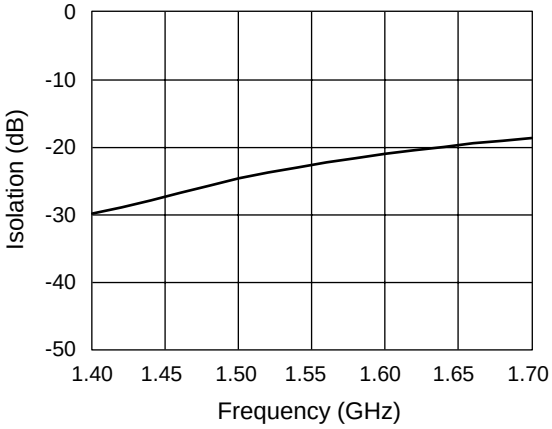
Typical Performance Data



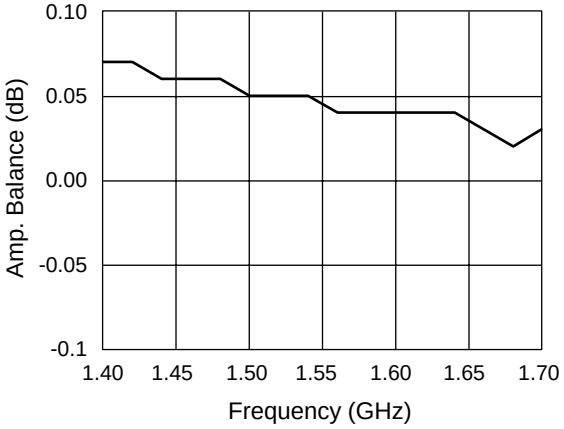
Insertion Loss vs. Frequency



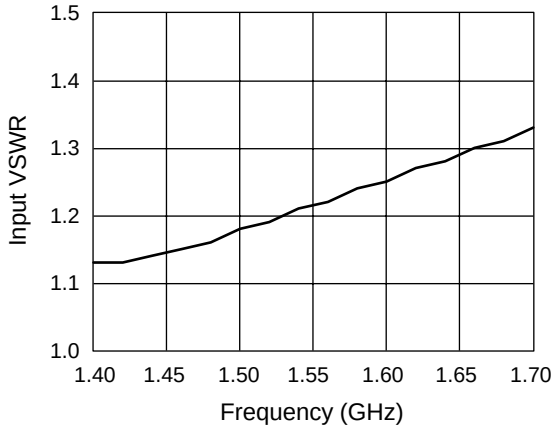
Output VSWR vs. Frequency



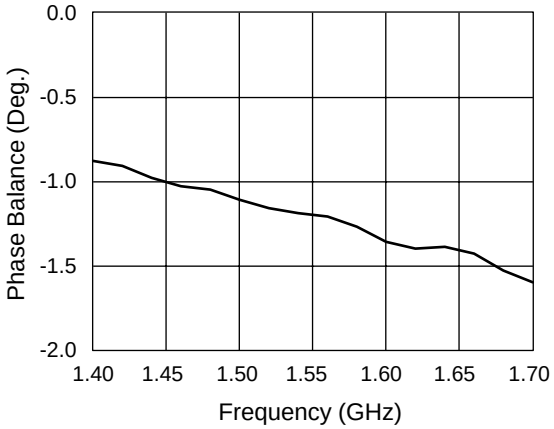
Isolation vs. Frequency



Amp. Balance vs. Frequency



Input VSWR vs. Frequency



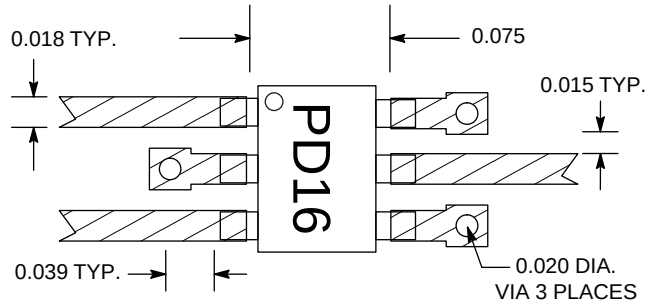
Phase Balance vs. Frequency

Absolute Maximum Ratings

Characteristic	Value
Input Power[1]	1.5 W CW
Input Power[2]	0.75 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