

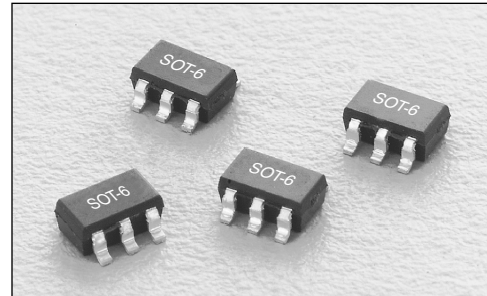
# Two-Way Power Splitter 2.1–2.3 GHz



PD22-73

## Features

- Low Cost
- Low Profile
- Small SOT-6 Package
- Tape & Reel



## Description

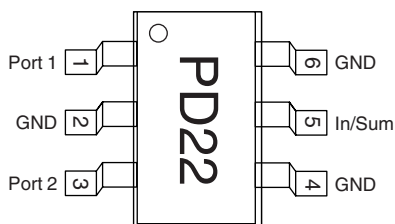
The PD22-73 is a 50 Ω, in-phase combiner/splitter tuned for the 2.1–2.3 GHz band. The monolithic circuitry is 100% passive and offers low loss, high isolation and exceptional phase/amplitude balance. It is available in the SOT-6 leaded surface mount package.

## Electrical Specifications at 25°C, 50 Ω System

Parameter	Min.	Typ.	Max.	Unit
Frequency	2.1		2.3	GHz
Insertion Loss Less 3 dB Split		0.55	0.7	dB
Isolation <sup>1</sup>	15.0	18.00		dB
Input VSWR		1.5:1	2.0:1	
Output VSWR		1.1:1	1.3:1	
Amplitude Balance		±0.10	±0.2	dB
Phase Balance		±1.00	±3.0	Deg.

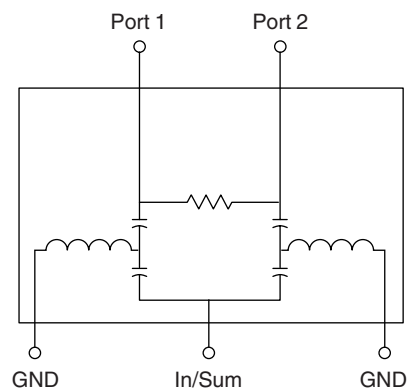
<sup>1</sup> Isolation can be increased to 23 dB with an external 5.6 nH inductor from in/sum port to ground.

## Pin Out

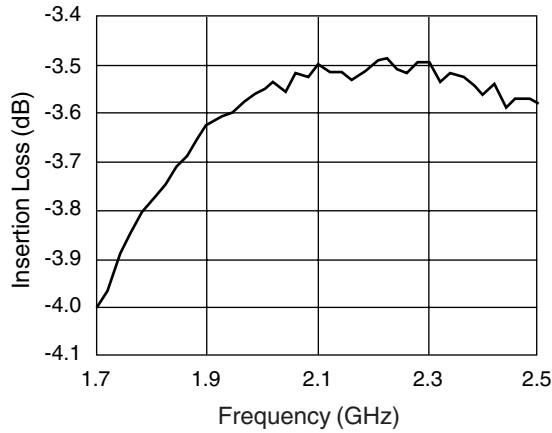


PD22 is the part marking.

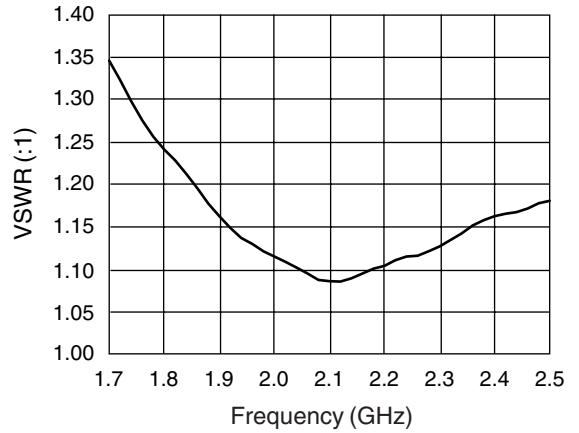
## Block Diagram



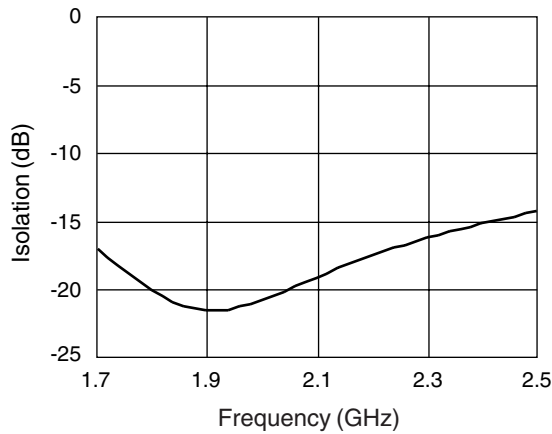
### Typical Performance Data



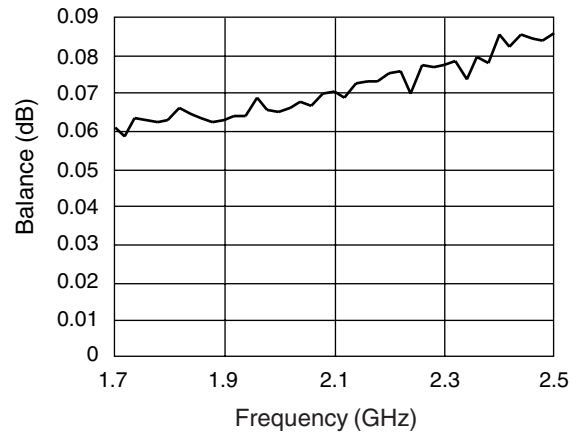
**Insertion Loss vs. Frequency**



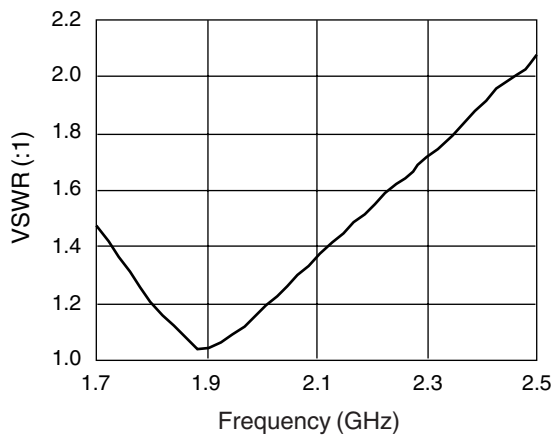
**Output VSWR vs. Frequency**



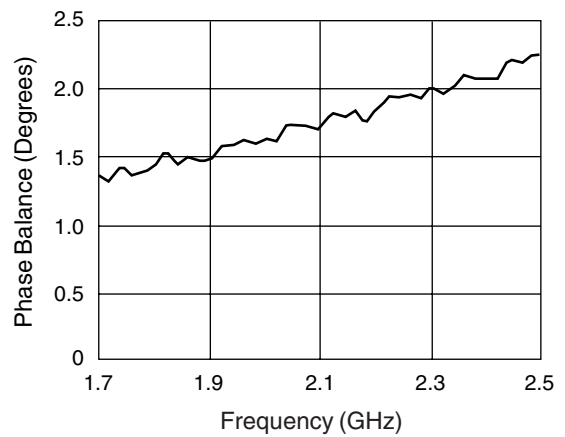
**Isolation vs. Frequency**



**Amplitude Balance vs. Frequency**

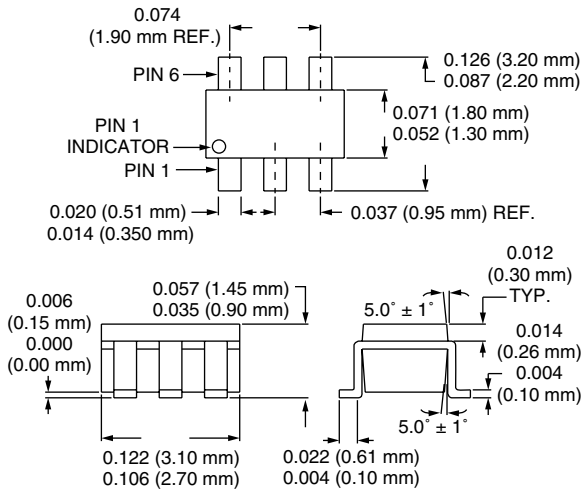


**Input VSWR vs. Frequency**



**Phase Balance vs. Frequency**

**SOT-6**

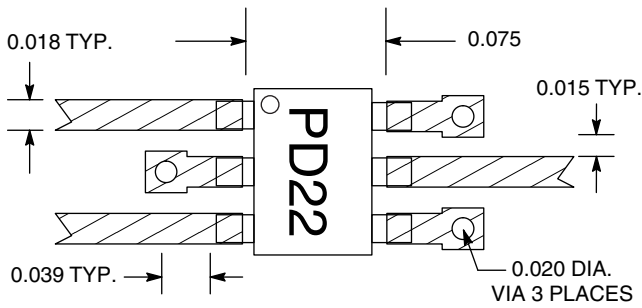


**Absolute Maximum Ratings**

Characteristic	Value
Input Power <sup>1</sup>	1.5 W CW
Input Power <sup>2</sup>	0.75 W 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