

# Directional Coupler 1.42–1.66 GHz



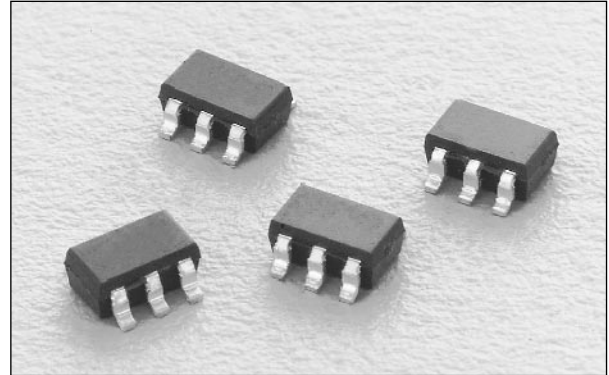
DC15-73

## Features

- Low Cost
- Low Profile
- Available in Small SOT-6 Lead Package
- Tape & Reel

## Description

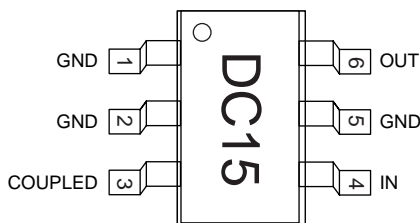
The DC15-73 is a monolithic directional coupler tailored to the 1.42–1.66 GHz band. It offers low loss, good isolation, good input/output matching and exceptional coupling repeatability. It is available in the SOT-6 lead surface mount package.



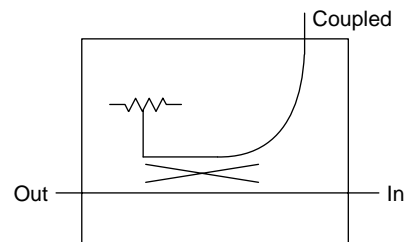
## Electrical Specifications at 25°C

Parameter	Min.	Typ.	Max.	Unit
Frequency	1.42		1.66	GHz
Insertion Loss		0.2	0.3	dB
Isolation	30	34		dB
Input VSWR		1.1:1	1.3:1	
Output VSWR		1.1:1	1.3:1	
Coupling	19.4	18.4	17.4	dB
Coupled Port VSWR		1.1:1	1.3:1	

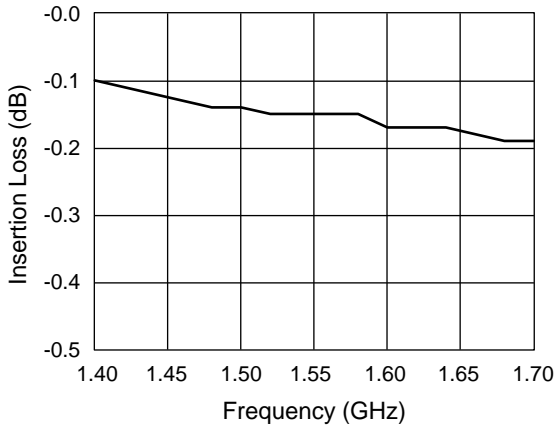
## Pin Out



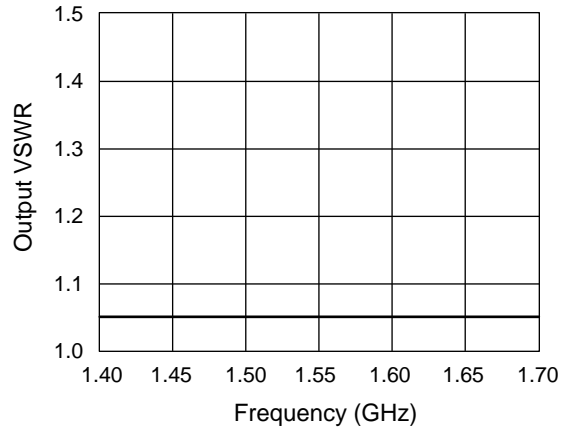
## Block Diagram



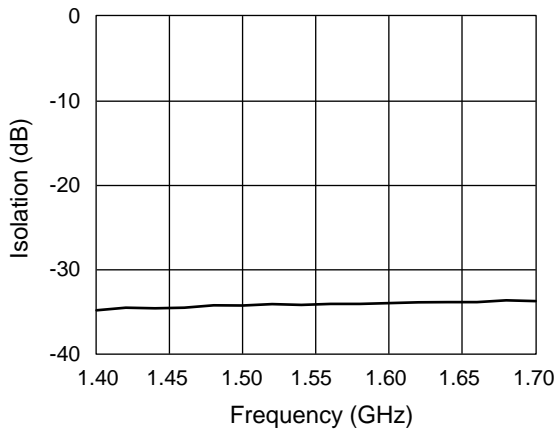
Typical Performance Data



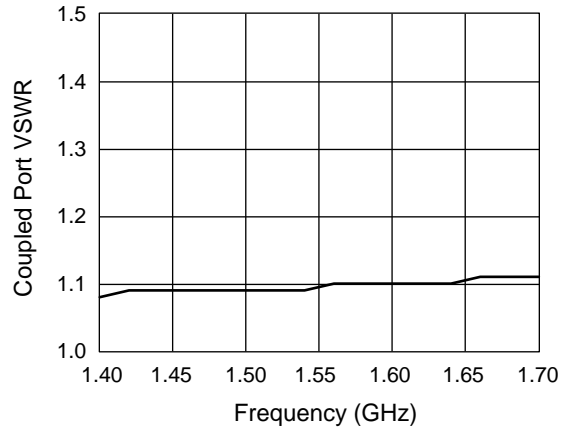
Insertion Loss vs. Frequency



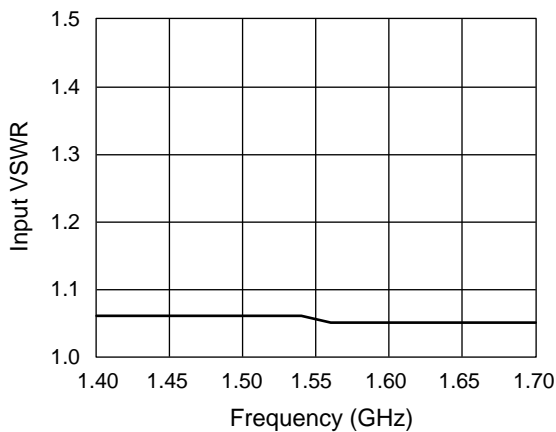
Output VSWR vs. Frequency



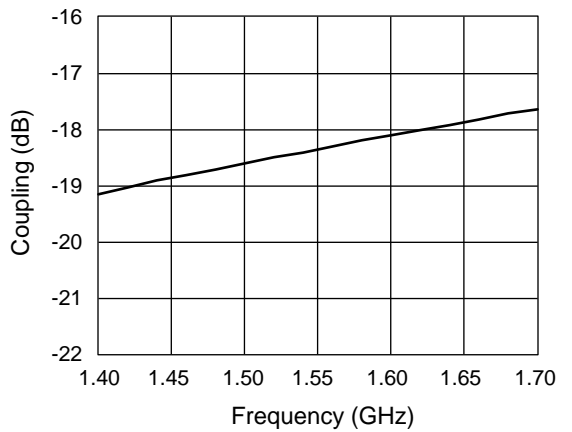
Isolation vs. Frequency



Coupled Port VSWR vs. Frequency



Input VSWR vs. Frequency



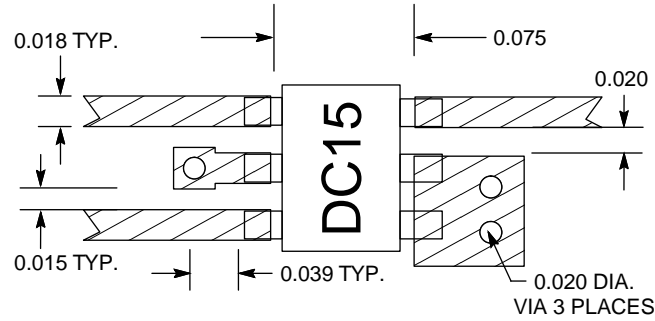
Coupling vs. Frequency

### Absolute Maximum Ratings

Characteristic	Value
Input Power <sup>1</sup>	4.0 W CW
Operating Temperature	-40°C to +85°C
Storage Temperature	-65°C to +150°C

1. When operating with a 2.0:1 maximum VSWR on all ports.

### Recommended Board Layout



Material is 10 mil FR4

### SOT-6

