

# Directional Coupler



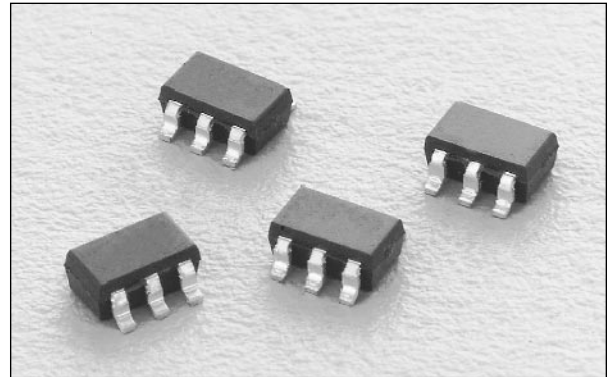
DC17-73

## Features

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

## Description

The DC17-73 is a monolithic directional coupler for low cost wireless applications. It offers low loss, good isolation, good input/output matching and exceptional coupling repeatability. Performance specified for two different bands. It is available in the SOT-6 lead surface mount package.

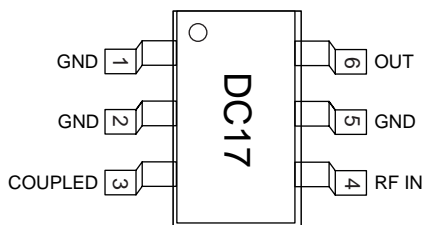


## Electrical Specifications at 25°C

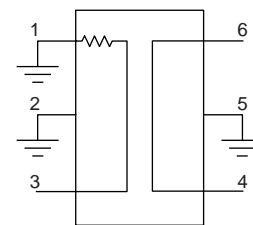
Parameter	Min.	Typ.	Max.	Unit	Min.	Typ.	Max.	Unit
Frequency	1.42		1.66	GHz	1.71		1.99	GHz
Insertion Loss <sup>1</sup>		.60	.70	dB		.75	.85	dB
Isolation	21	22		dB	20	21		dB
Input VSWR		1.1:1	1.3:1			1.1:1	1.3:1	
Output VSWR		1.1:1	1.3:1			1.1:1	1.3:1	
Coupling	10.8	11.8	12.8	dB	9.3	10.3	11.3	dB
Coupled Port VSWR		1.2:1	1.3:1			1.25:1	1.35:1	

1. Coupling loss included.

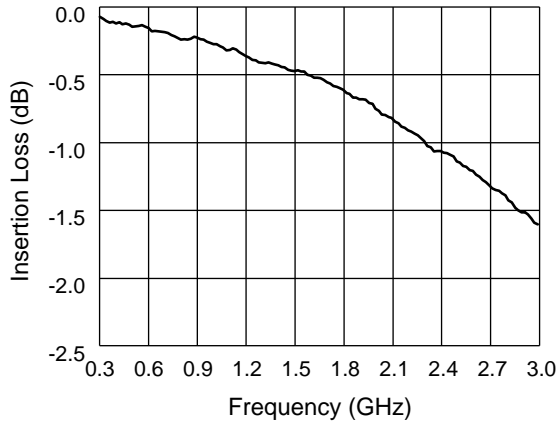
## Pin Out



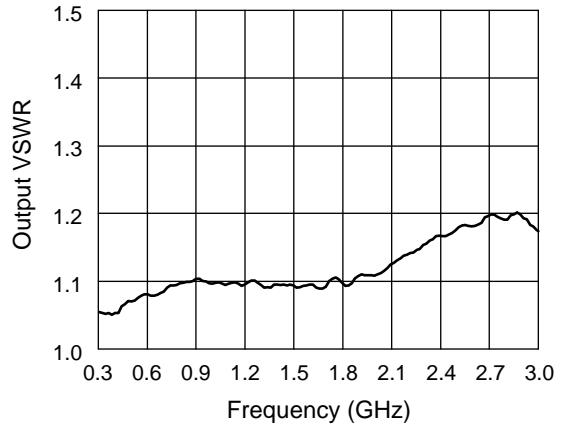
## Block Diagram



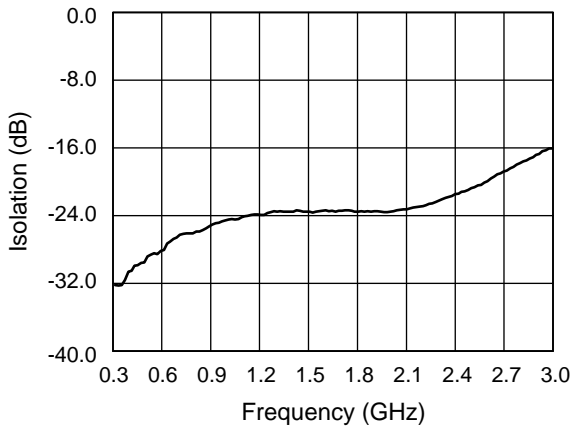
**Typical Performance Data**



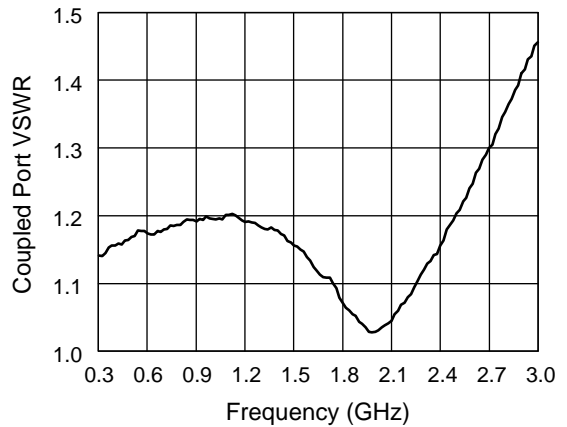
**Insertion Loss vs. Frequency**



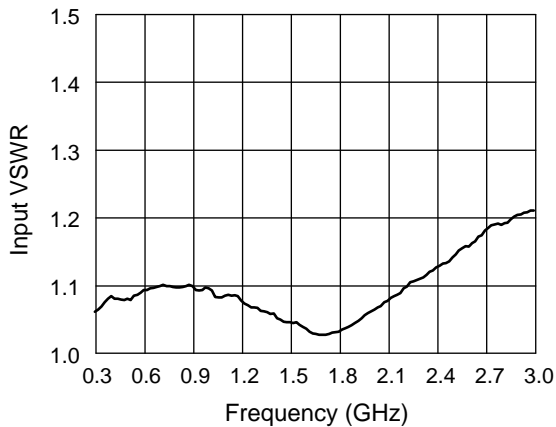
**Output VSWR vs. Frequency**



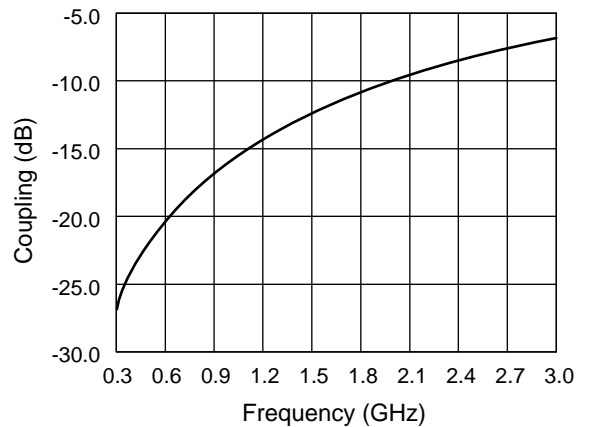
**Isolation vs. Frequency**



**Coupled Port VSWR vs. Frequency**



**Input VSWR vs. Frequency**



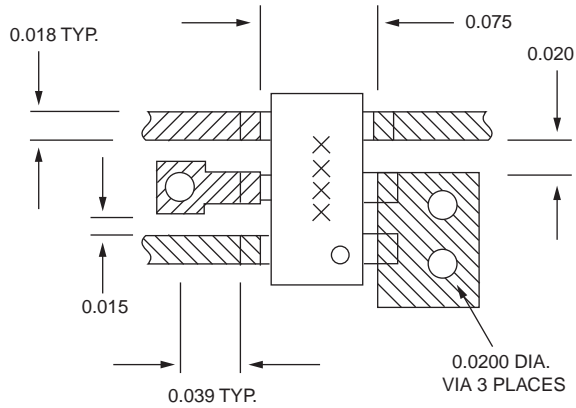
**Coupling vs. Frequency**

### Absolute Maximum Ratings

Characteristic	Value
Input Power	+4 W
Operating Temperature	-40°C to +85°C
Storage Temperature	-65°C to +150°C
Electrostatic Discharge	+125 V

Note: Exceeding these parameters may cause irreversible damage.

### Recommended Board Layout



Material is 10 mil FR4.

### SOT-6

