

# Directional Coupler



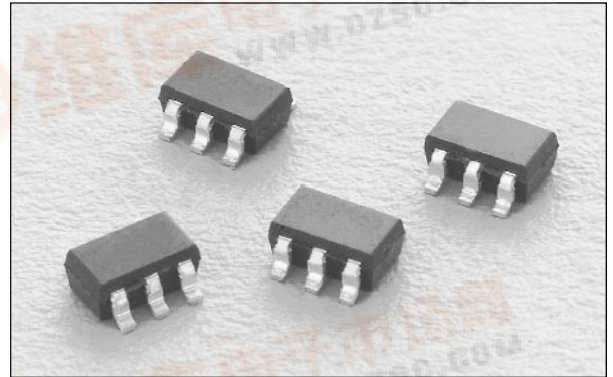
## DC16-73

### Features

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

### Description

The DC16-73 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 is specified for two different bands. It is available in the SOT-6 leaded surface mount package.

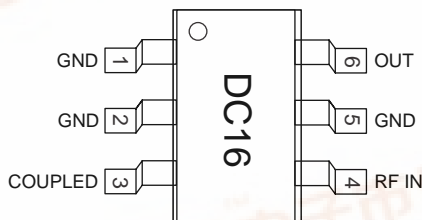


### Electrical Specifications at 25°C

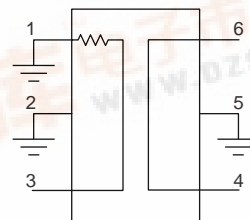
Parameter	Min.	Typ.	Max.	Unit	Min.	Typ.	Max.	Unit
Frequency	1.42		1.66	GHz	1.71		1.99	GHz
Insertion Loss <sup>1</sup>		.25	.35	dB		.35	.45	dB
Isolation	23	24		dB	22	23		dB
Input VSWR		1.1:1	1.3:1			1.1:1	1.3:1	
Output VSWR		1.1:1	1.3:1			1.1:1	1.3:1	
Coupling	14.6	15.6	16.6	dB	13.8	14.8	15.8	dB
Coupled Port VSWR		1.1:1	1.3:1			1.1:1	1.3:1	

1. Coupling loss included.

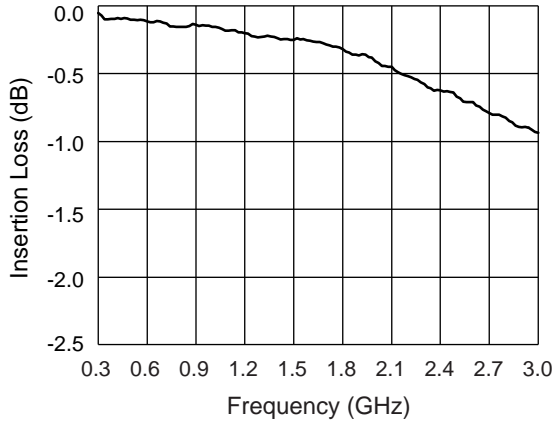
### Pin Out



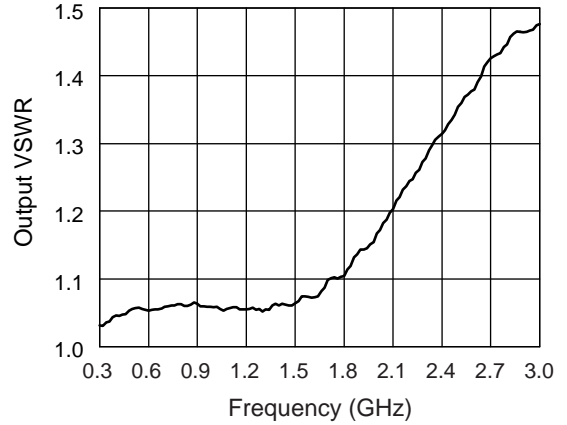
### Block Diagram



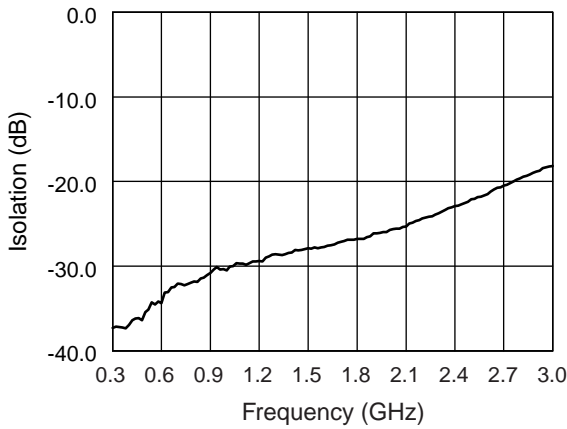
**Typical Performance Data**



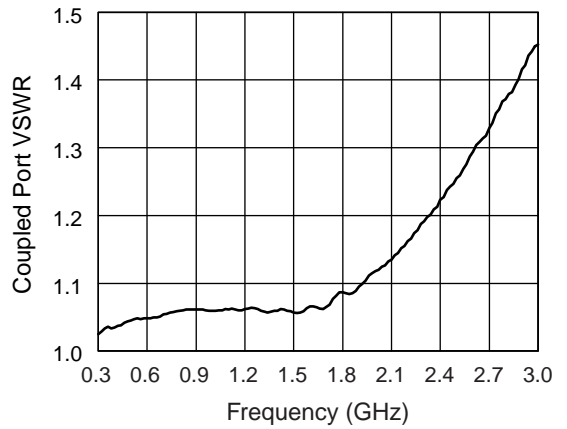
**Insertion Loss vs. Frequency**



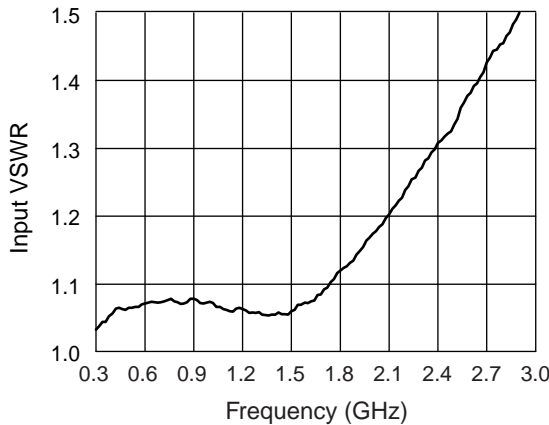
**Output VSWR vs. Frequency**



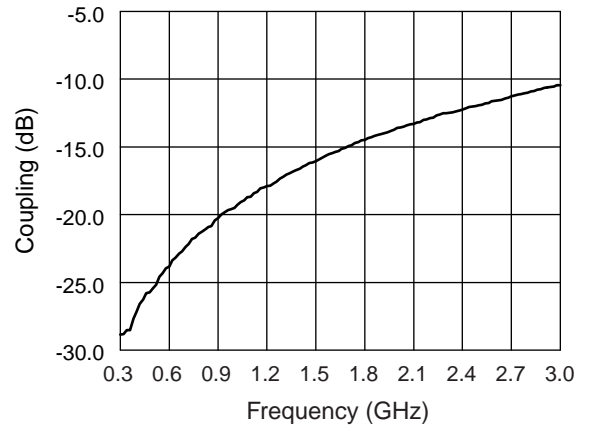
**Isolation vs. Frequency**



**Coupled Port VSWR vs. Frequency**



**Input VSWR vs. Frequency**



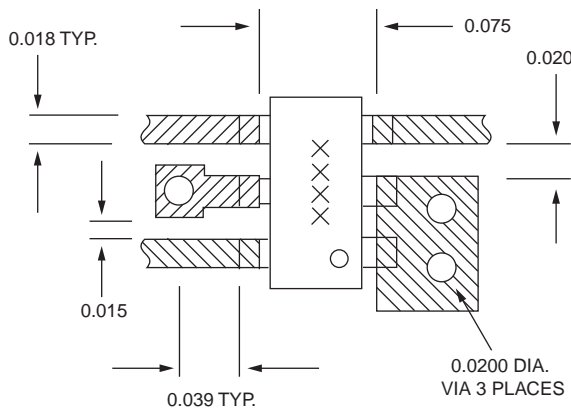
**Coupling vs. Frequency**

### 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

