

# Directional Coupler 0.81–0.96 GHz



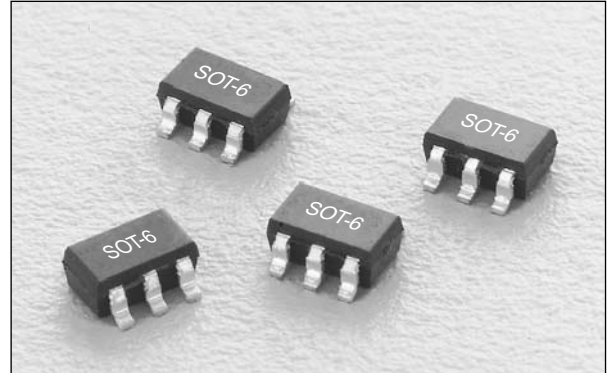
DC09-73

## Features

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

## Description

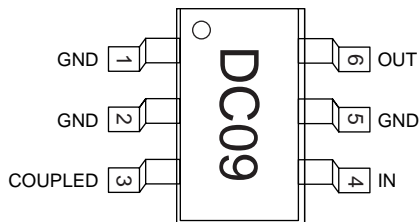
The DC09-73 is a monolithic directional coupler tailored to the 0.81–0.96 GHz band. It offers low loss, good isolation, good input/output matching and exceptional coupling repeatability. It is available in the SOT-6 lead surface mount package.



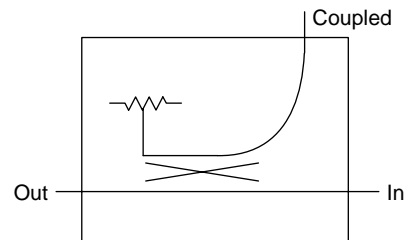
## Electrical Specifications at 25°C

Parameter	Min.	Typ.	Max.	Unit
Frequency	0.81		0.96	GHz
Insertion Loss		0.2	0.3	dB
Isolation	27	30		dB
Input VSWR		1.1:1	1.3:1	
Output VSWR		1.1:1	1.3:1	
Coupling	20.8	19.8	18.8	dB
Coupled Port VSWR		1.1:1	1.3:1	

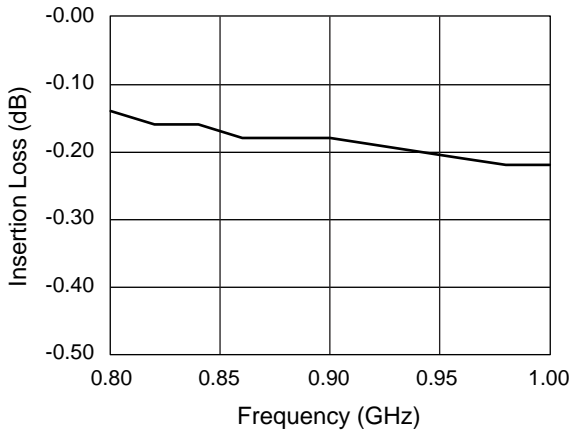
## Pin Out



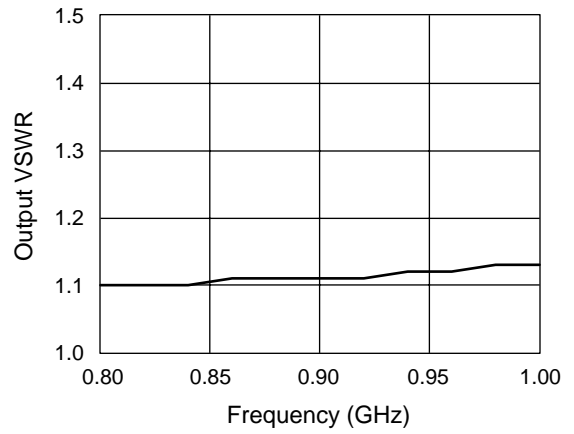
## Block Diagram



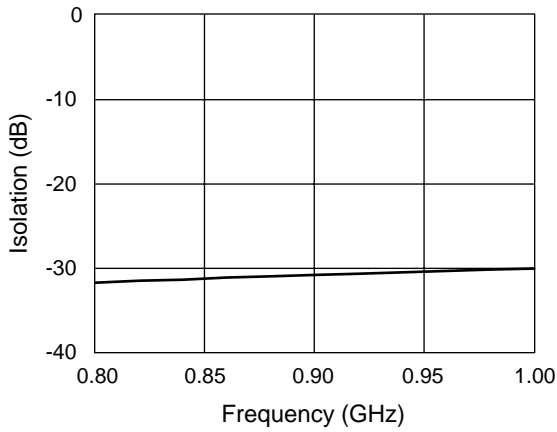
### Typical Performance Data



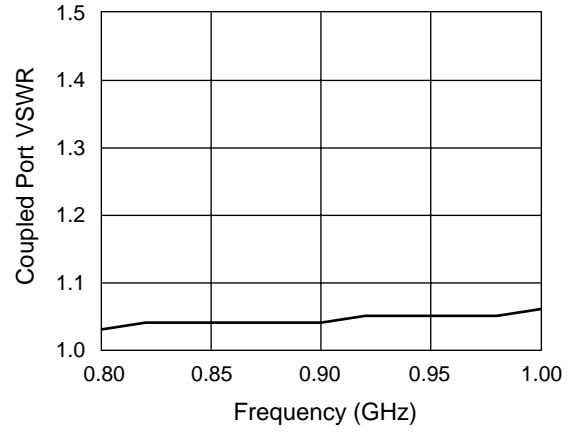
**Insertion Loss vs. Frequency**



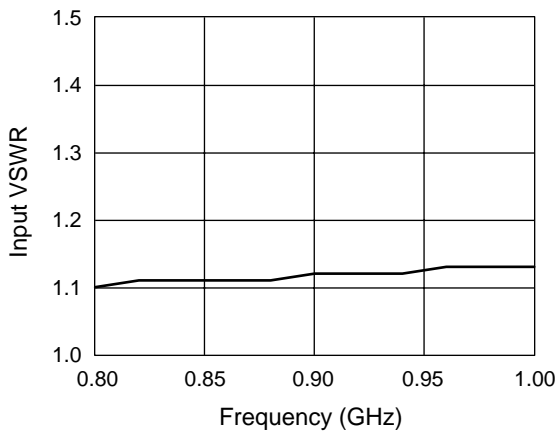
**Output VSWR vs. Frequency**



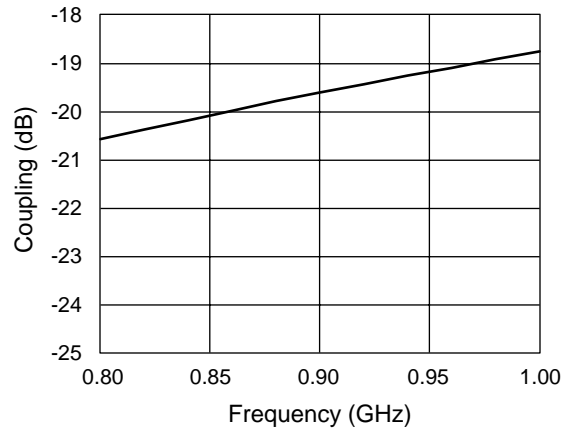
**Isolation vs. Frequency**



**Coupled Port VSWR vs. Frequency**



**Input VSWR vs. Frequency**



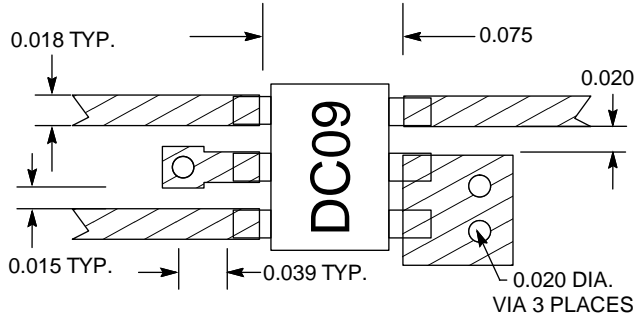
**Coupling vs. Frequency**

### 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

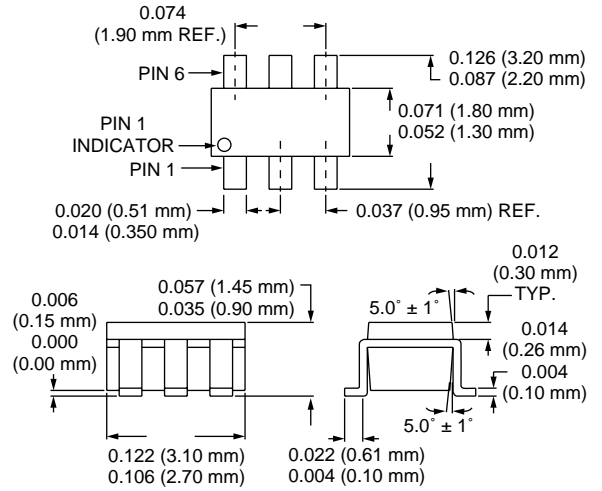
1. When operating with a 2.0:1 maximum VSWR on all ports.

### Recommended Board Layout



Material is 10 mil FR4

### SOT-6





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