

Directional Coupler

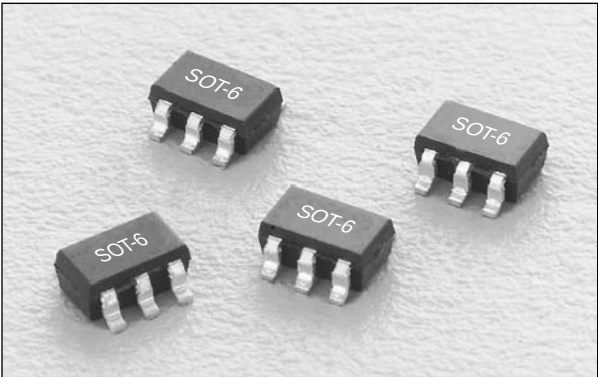
DC16-73

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.

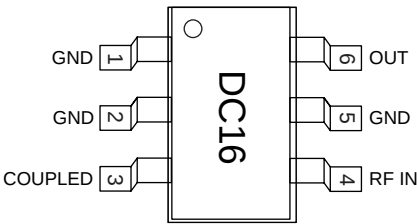


Electrical Specifications at 25°C

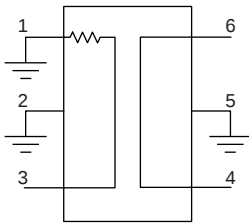
Parameter	Min.	Typ.	Max.	Unit	Min.	Typ.	Max.	Unit
Frequency	1.42		1.66	GHz	1.71		1.99	GHz
Insertion Loss ¹		.25	.35	dB		.35	.45	dB
Isolation	23	24		dB	22	23		dB
Input VSWR		1.1:1	1.3:1			1.1:1	1.3:1	
Output VSWR		1.1:1	1.3:1			1.1:1	1.3:1	
Coupling	14.6	15.6	16.6	dB	13.8	14.8	15.8	dB
Coupled Port VSWR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

1. Coupling loss included.

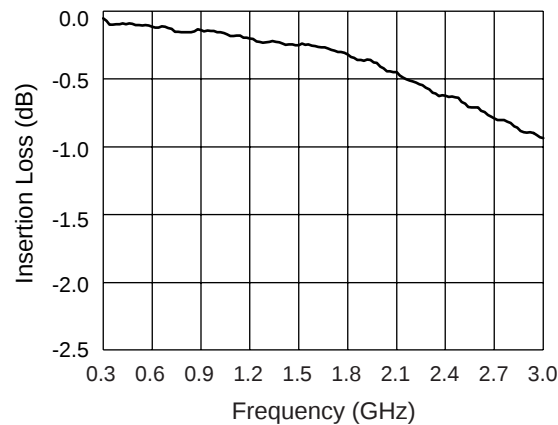
Pin Out



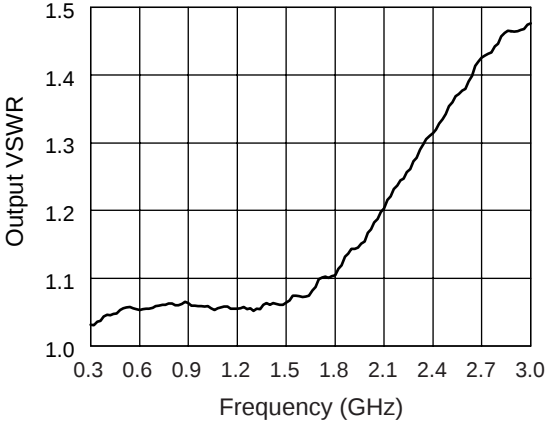
Block Diagram



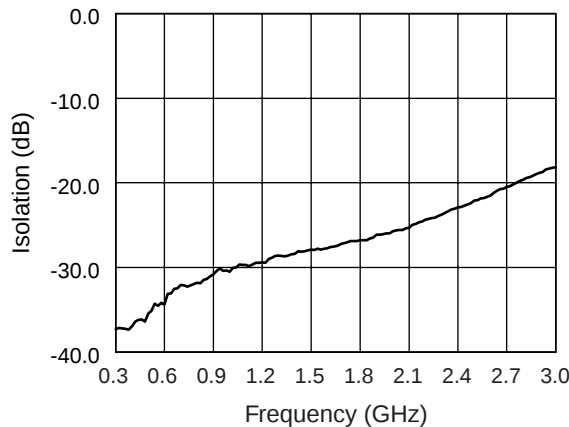
Typical Performance Data



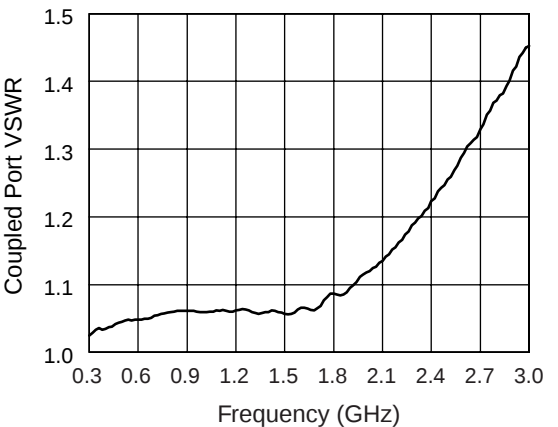
Insertion Loss vs. Frequency



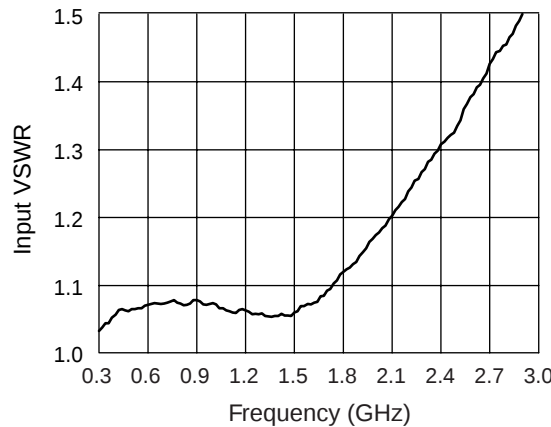
Output VSWR vs. Frequency



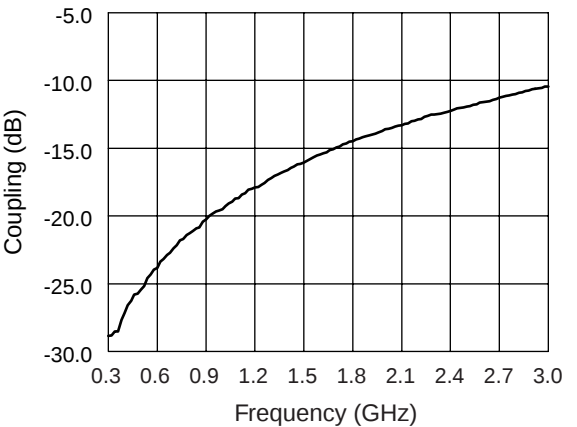
Isolation vs. Frequency



Coupled Port VSWR vs. Frequency



Input VSWR vs. Frequency



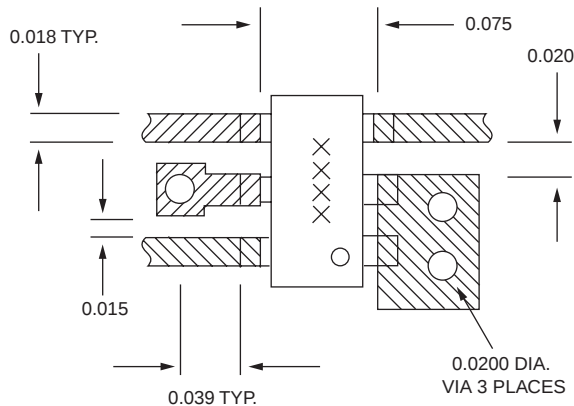
Coupling vs. Frequency

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

