

Directional Coupler

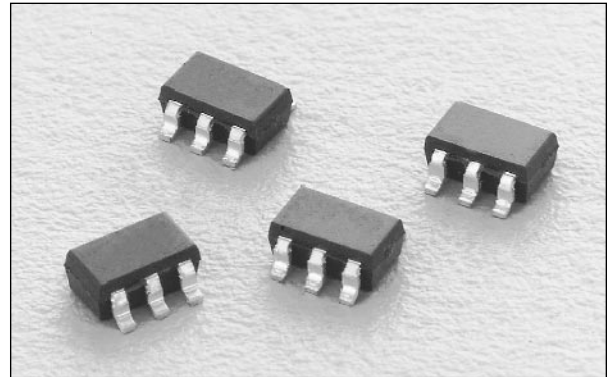
DC17-73

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.

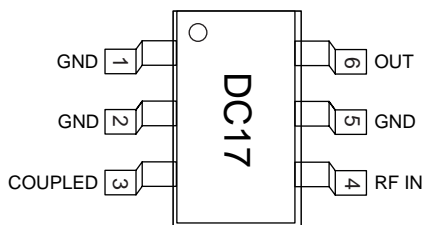


Electrical Specifications at 25°C

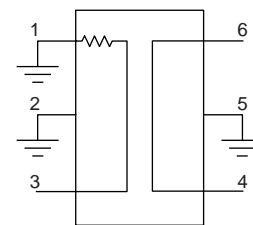
Parameter	Min.	Typ.	Max.	Unit	Min.	Typ.	Max.	Unit
Frequency	1.42		1.66	GHz	1.71		1.99	GHz
Insertion Loss ¹		.60	.70	dB		.75	.85	dB
Isolation	21	22		dB	20	21		dB
Input VSWR		1.1:1	1.3:1			1.1:1	1.3:1	
Output VSWR		1.1:1	1.3:1			1.1:1	1.3:1	
Coupling	10.8	11.8	12.8	dB	9.3	10.3	11.3	dB
Coupled Port VSWR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

1. Coupling loss included.

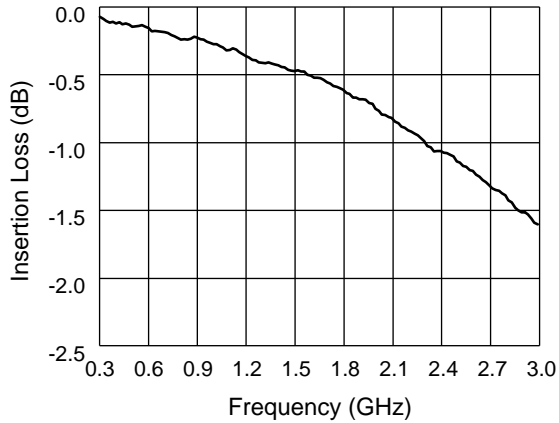
Pin Out



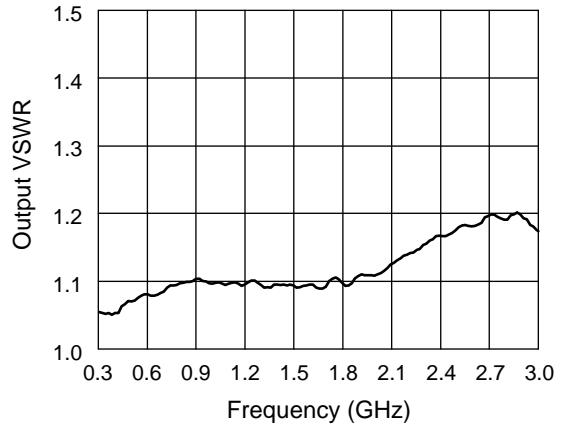
Block Diagram



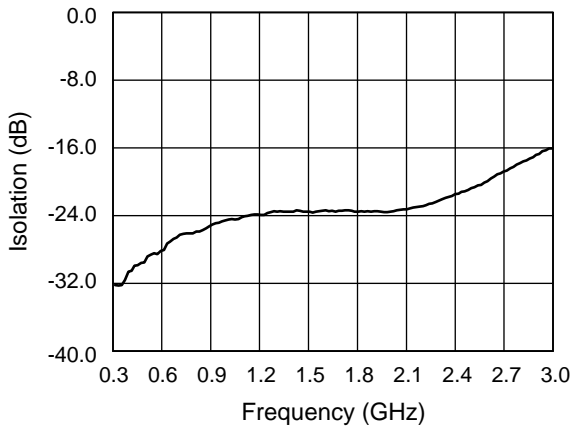
Typical Performance Data



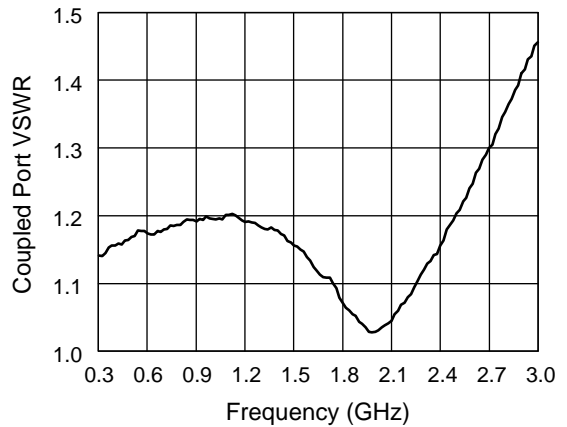
Insertion Loss vs. Frequency



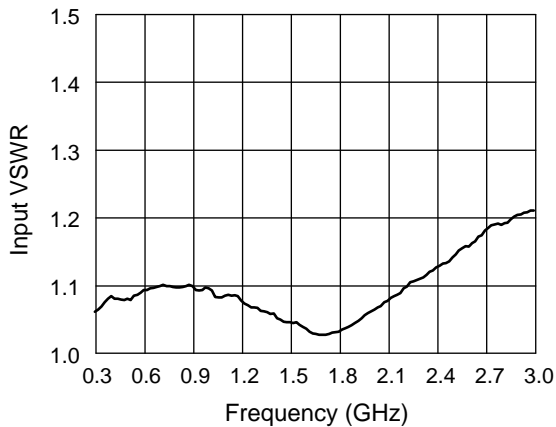
Output VSWR vs. Frequency



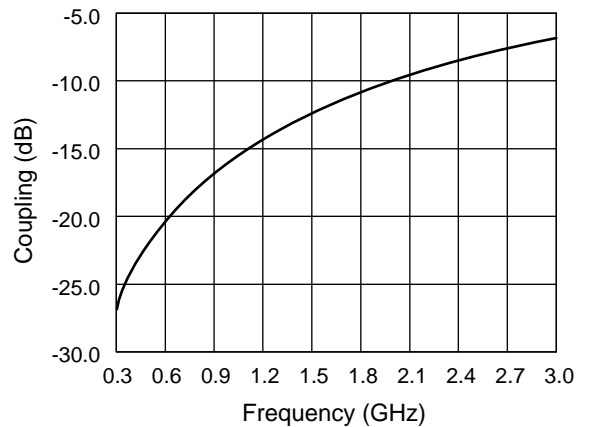
Isolation vs. Frequency



Coupled Port VSWR vs. Frequency



Input VSWR vs. Frequency



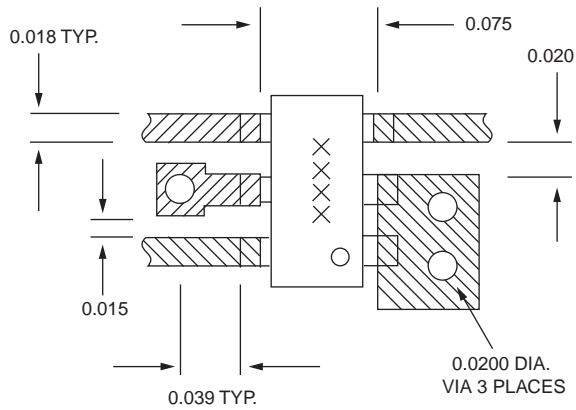
Coupling vs. Frequency

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

