

Surface Mount Directional Coupler

75Ω

10 to 1000 MHz

TCD-18-4-75X+

Features

- wideband, 10 to 1000 MHz
- low mainline loss, 0.7 dB typ.
- aqueous washable
- leads for excellent solderability
- protected by US Patent 6,140,887

Applications

- VHF/UHF
- CATV
- cellular



Generic photo used for illustration purposes only

CASE STYLE: DB1627

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



Available Tape and Reel at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500
13"	1000, 2000

Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		10		1000	MHz
Mainline Loss ¹	10 - 100	—	0.9	1.3	dB
	100 - 500	—	0.7	1.2	
	500 - 1000	—	0.8	1.3	
Nominal Coupling	10 - 1000	—	18.0±0.5	—	dB
Coupling Flatness(±)	10 - 1000	—	±0.9	—	dB
Directivity	10 - 100	15	20	—	dB
	100 - 500	15	22	—	
	500 - 1000	—	18	—	
VSWR	10 - 1000	—	1.20	—	:1
Input Power	10 - 100	—	—	1.0	W
	100 - 1000	—	—	1.0	

1. Mainline loss includes theoretical power loss at coupled port.

Maximum Ratings

Parameter	Ratings
Operating Temperature	-40°C to 85°C*
Storage Temperature	-55°C to 100°C

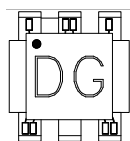
Permanent damage may occur if any of these limits are exceeded.

* Case temperature is defined as temperature on ground leads.

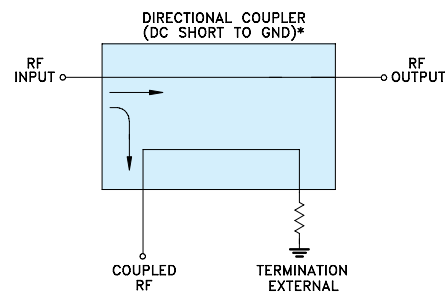
Pin Connections

Function	Pin Number
INPUT	3
OUTPUT	4
COUPLED	1
GROUND	2
75Ω TERM EXTERNAL	6
NOT USED	5

Product Marking



Electrical Schematic



* ELECTRICAL SCHEMATIC IS FOR DIRECTIONAL COUPLER WITH INTERNAL TRANSFORMER(S) AND EXTERNAL TERMINATION.



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