

#### 11 dB, Bi-Directional Coupler, 10 - 500 MHz

#### Features

- Constant Coupling Within ± 0.5 dB Max
- MIL-STD-202 Screening Available

#### Description

Bi-Directional couplers offer the ability to couple the power in two directions while maintaining directivity.







# 220 MAX, (559)

Bottom of Case is AC Ground Dimensions in 10 are in mm Unless Otherwise Noted: XXX = +0.010 (XX = +0.25) XX = +0.02 (X = +0.5)

### **Pin Configuration**

Pin No.	Function	Pin No.	Function
1	GND	7	GND
2	В	8	A
3	GND	9 GND	
4	GND	10	GND
5	С	11	D
6	GND	12	GND

## Electrical Specifications<sup>1</sup>: $T_A = -55^{\circ}C$ to $+85^{\circ}C$

Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
Coupling	Input to Output	_	dB	9.8	10.8	11.8
Coupling Flatness	—	—	dB	—	—	± 0.5
VSWR	All Ports	10 - 500 MHz 25 - 200 MHz	Ratio Ratio		_	1.8:1 1.5:1
Directivity	Both Directions	_	dB	17	—	—
Main Line Loss <sup>2</sup>	_	—	dB	—	_	1.6
Input Power	_	—	Watt	_	_	1.0

1. All specifications apply with 50 ohm source and load impedance.

2. Includes theoretical power split.

This product contains elements protected by United States Patent umber 3,426,298.

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<sup>1</sup> 

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# **CH-138**



Rev. V4

11 dB, Bi-Directional Coupler, 10 - 500 MHz

### **Functional Diagram**



## **Ordering Information**

Part Number	Package		
CH-138 PIN	TO-8-2		

**Typical Performance Curves** 

Main Line Loss



Directivity



#### VSWR



Coupling



2

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