

Engineering Development Model

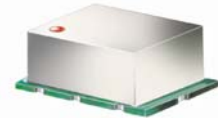
Bi-Directional Coupler

SYDC-ED13563/1

Important Note

This model has been designed, built and tested in our engineering department. Performance data represents model capability. At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.

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CASE STYLE : AH202-1

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C				
Parameter		Min.	Typ.	Max. Units
Frequency		3		120 MHz
Coupling	Nominal		29±1.5	dB
	Flatness		±.80	dB
Mainline Loss*	3-30 MHz		0.02	dB
	30-60 MHz		0.04	dB
	60-120 MHz		0.06	dB
Directivity	3-30 MHz		26	dB
	30-60 MHz		32	dB
	60-120 MHz		27	dB
VSWR	3-120 MHz		1.03	(:1)
RF Power Input (1)	3-120 MHz			55 W

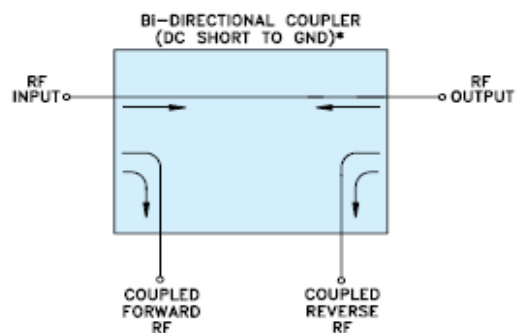
(1) The user must provide adequate means of heat removal to limit the temperature of ground connections 2,3,6,7 to 85°C, in order to ensure proper performance. At 25°C ambient temperature this requires thermal resistance of the user's PC board heat sink to be 35°C/W or less when the unit is driven at maximum specified RF input power, 55W. At higher ambient temperature, with the same heat sink, input power in watts must not exceed $55W \times (85^{\circ}C - T_{\text{ambient}}) \div 60^{\circ}C$.

Note: * Mainline loss includes theoretical coupled power loss of .005 dB at 29 dB coupling.

MAXIMUM RATINGS	
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to 100°C

PIN CONNECTIONS	
INPUT	8
OUTPUT	1
COUPLED FORWARD	5
COUPLED REVERSE	4
GROUND	2,3,6,7

Electrical Schematic



* ELECTRICAL SCHEMATIC IS FOR BI-DIRECTIONAL COUPLER WITH INTERNAL TRANSFORMER(S) THAT ROUTES DC FROM RF PORTS TO GROUND.



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The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

IF/RF MICROWAVE COMPONENTS



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