Engineering Development Model

Bi-Directional Coupler SYDC-ED12483/3

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.

Please click "Back", and then click "Contact Us" for Applications support.

CASE STYLE : AH202-1

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		**Min.**	**Typ.**	**Max.**	**Units**
Frequency		.3		180	MHz
Coupling	**Nominal**		20±0.15		dB
	Flatness		±0.09		dB
Mainline Loss **	**.3-3 MHz**		0.1		dB
	3-90 MHz		0.1		dB
	90-180 MHz		0.2		dB
Directivity	**.3-3 MHz**		45		dB
	3-90 MHz		36		dB
	90-180 MHz		16		dB
VSWR	**.3-180 MHz**		1.05		(:1)
RF Power Input***	**.3-180 MHz**			15	W

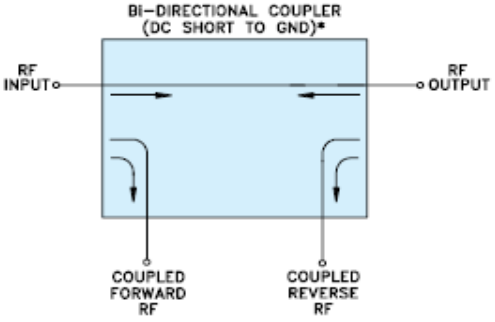
** Mainline loss includes theoretical coupled power loss of 0.0436 dB at 20 dB coupling.

***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 40°C/W or less when the unit is driven at maximum specified RF input power, 15W. At higher ambient temperature, with the same heat sink, input power in watts must not exceed 15W x (85°C-Tambient) ÷ 60°C.

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.