## Bi-Directional Coupler SYDC-ED14256

## **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.





CASE STYLE: AH1596

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		Min.	Тур.	Max.	Units
Frequency		1.5		30	MHz
Coupling	Nominal		20.5±1		dB
	<b>Flatness</b>		±0.05		dB
Mainline Loss **	1.5-30 MHz		0.06		dB
Directivity	1.5-30 MHz		33		dB
VSWR	1.5-30 MHz		1.12		(:1)
RF Power Input***	1.5-30 MHz			50	W

<sup>\*\*</sup> Mainline loss includes theoretical coupled power loss of 0.044 dB at 20 dB coupling.

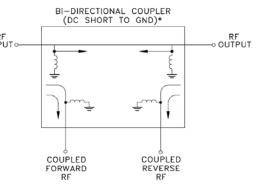
<sup>\*\*\*</sup>The user must provide adequate means of heat removal to limit the temperature of ground connections 2,3,6,7 to 65°C, in order to ensure proper performance. At 25°C ambient temperature this requires thermal resistance of the user's PC board heat sink to be 10°C/W.

MAXIMUM RATINGS			
Operating Temperature	-40°C to 65°C Case <sup>(1)</sup>		
Storage Temperature	-55°C to 100°C		

<sup>&</sup>lt;sup>(1)</sup>Case temperature is defined as temperature on ground leads

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

## **Functional Diagram**



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



