

BI-DIRECTIONAL COUPLER

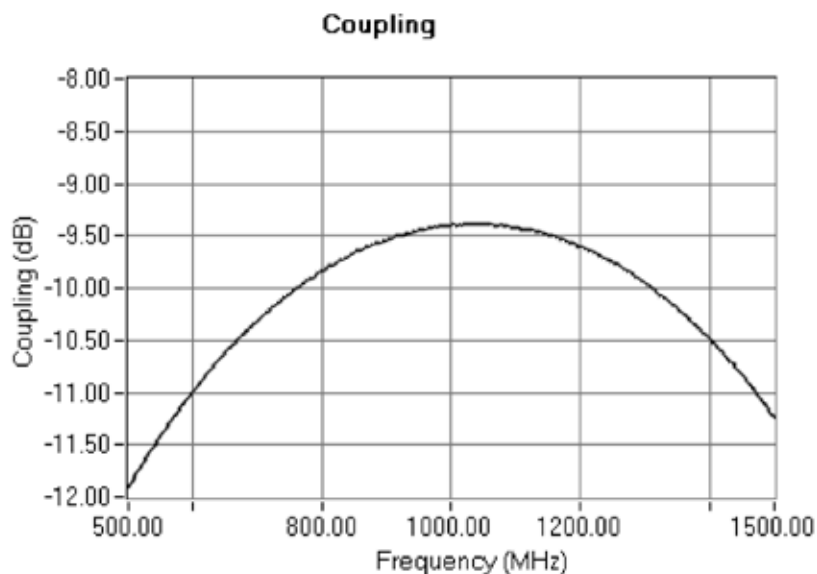
SYNSTRIIP® MODEL: SCS-8012B

ULTRA LOW LOSS

800 - 1200 MHz

FEATURES:

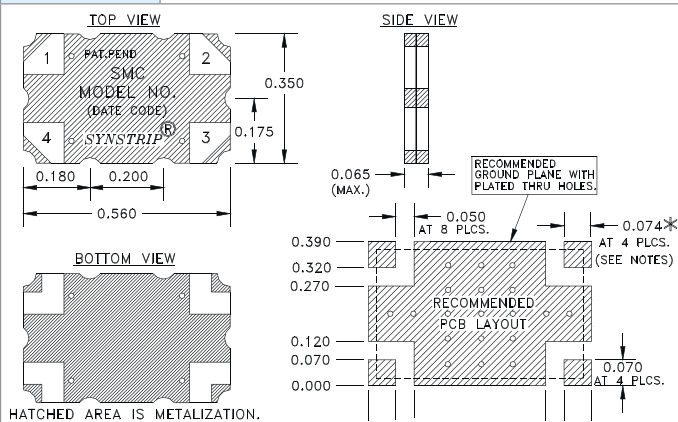
- ▶ SYNSTRIIP® Technology
- ▶ Small Size, Surface Mount
- ▶ Optimum Performance



SPECIFICATIONS (Rev. B 08/21/07)

Frequency	Extended Band 800 - 1200 MHz		Optimized Band 815 - 960 MHz	
Coupling	10 dB ±1 dB (Nom.)			
Coupling Flatness	Freq. (MHz)		dB (Max.)	
	815-960		±0.4	
	800-1200		±0.6	
Mainline Loss	0.25 dB (Max.) *			
Directivity	Freq. (MHz)		dB (Typ.)	dB (Min.)
	815-960		22	20
	800-1200		22	18
Frequency Sensitivity	0.6 dB (Max.)			
Power Rating	100 Watts (Ave/CW Max.)			
Impedance	50 Ohms (Nom.)			
VSWR	dB (Typ.)		dB (Max.)	
	1.2:1		1.25:1	
Operating Temperature Range	-55 to +85 °C			
* Excluding coupling loss of 0.46 dB				

Package # 226-1



IMPORTANT NOTES:

- 1) THE WIDTH OF THE LIVE PADS SHOULD CORRESPOND TO 50 OHM FOR THE DI-ELECTRIC CONSTANT AND THICKNESS OF THE CHOSEN PC BOARD MATERIAL. THE GIVEN VALUE(*) CORRESPONDS TO $\epsilon_r=3.38$ & THICKNESS=0.032" (ROGERS RO 4003).
- 2) THE COUPLER SHOULD BE SOLDER ATTACHED TO THE RECOMMENDED PC BOARD LAYOUT FOR ACHIEVING SPECIFIED PERFORMANCE.

PORT CONFIGURATION

Input	Output	Isolated	Coupled
1	2	3	4

Note: For directional coupler operation, connect 50 Ohms load from isolated port to ground.

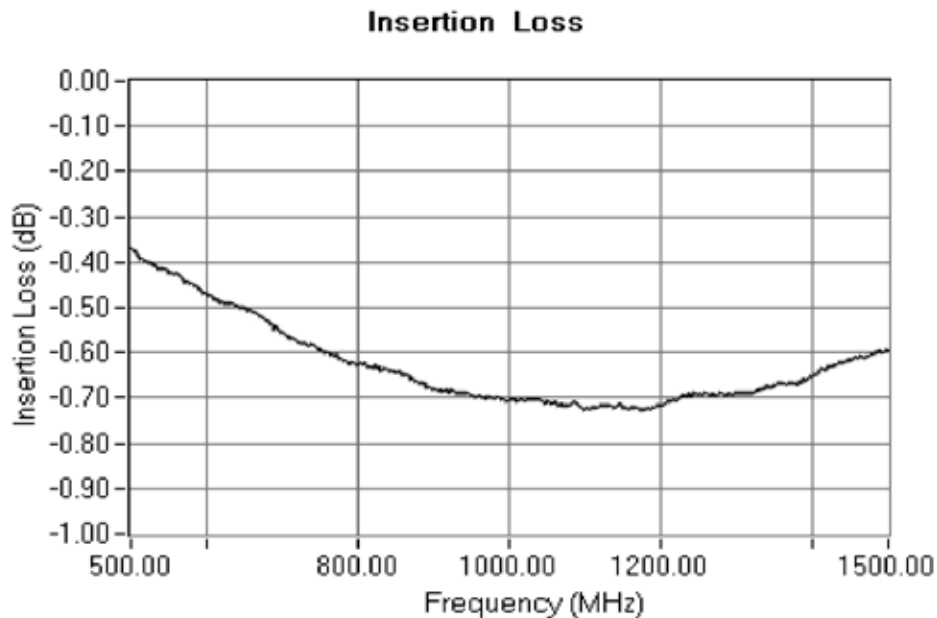
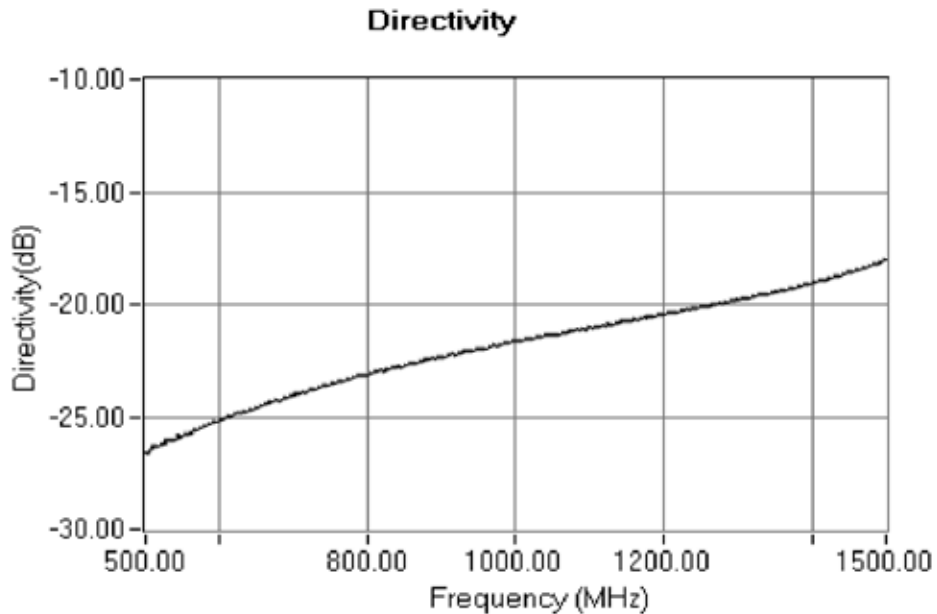
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PERFORMANCE PLOTS



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