20dB COUPLER
SURFACE MOUNT MODEL SCS*100800-20*

November 16, 2009

Datasheet **WIDE BANDWIDTH 1000-8000 MHz**

Features:

- **ITAR-Free**
- **Excellent Performance**
- **Wide Bandwidth**
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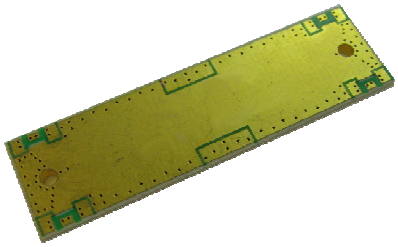
-



Specifications:	***Without Matching***	***With ext. Matching Structure***
Frequency	1000-8000 MHz	
Insertion Loss (Typ/Max)	0.3dB/0.5dB	0.3dB/0.5dB
Coupling(Typ/Max)	20.8dB/±2.3dB	20.8dB/±2.3dB
Directivity(Typ/Min)	14dB/7dB	15dB/7dB
Return Loss(Typ/Min)	17dB/14dB	27dB/19dB
Input Power Rating	25 W	
Operating Temp	-45 to +85 ℃	

All Parameters for RO4003C / 16mil customer boards!

Phasing Diagram:

in \ out	1	2	3	4
1		coupled	thru	iso
2	coupled		iso	thru
3	thru	iso		coupled
4	iso	thru	coupled	

* for port numbering see outline drawing

Potsdamer Straße 18a, 14513 Teltow • Tel: (03328)35177-1 • Fax: (03328)35177-9
World Wide Web: http://www.synergymwavegmbh.com

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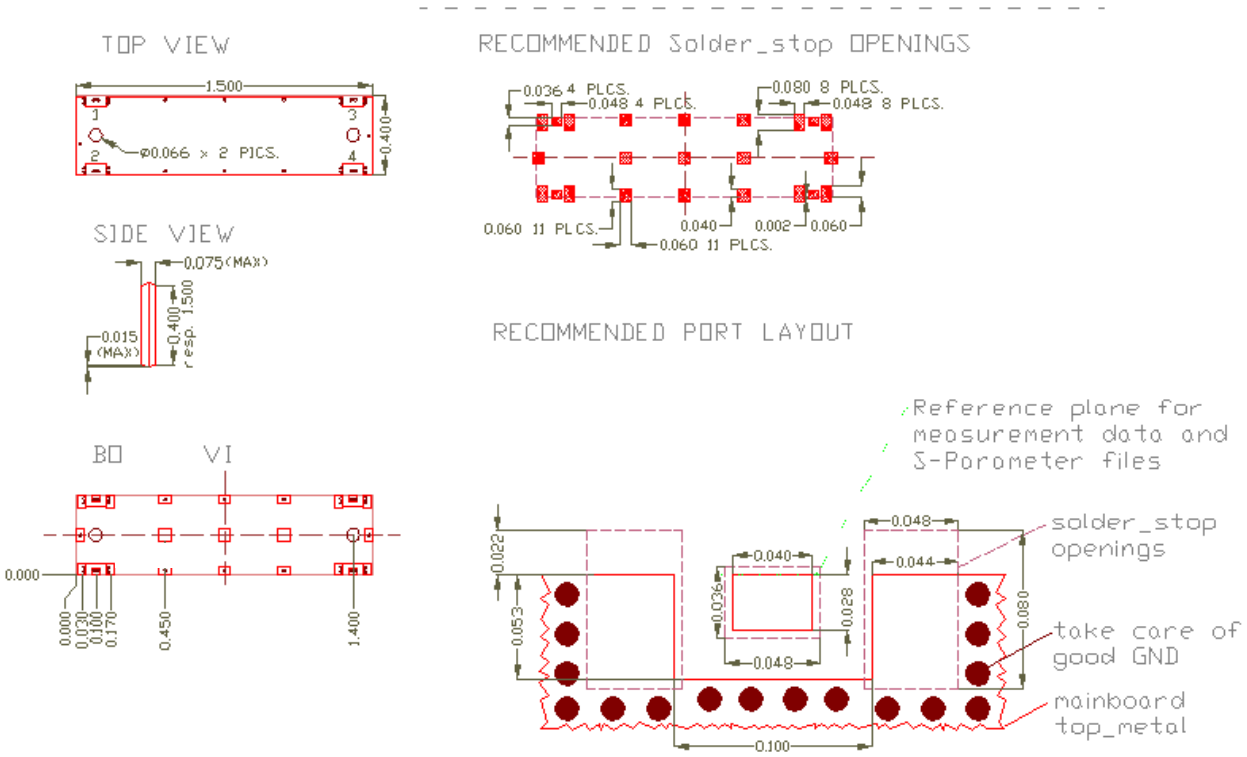
Outline Drawing:



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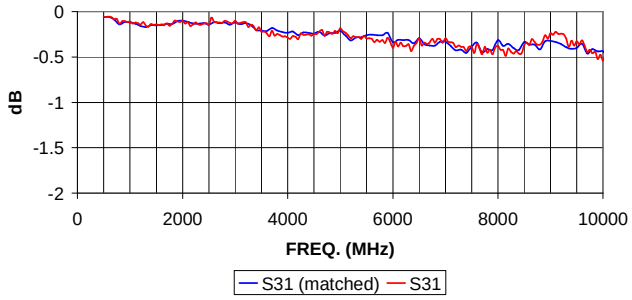
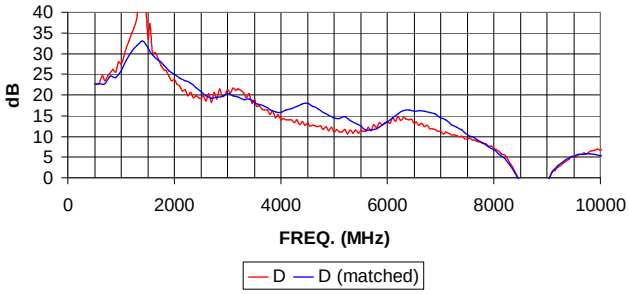
Performance Plots:

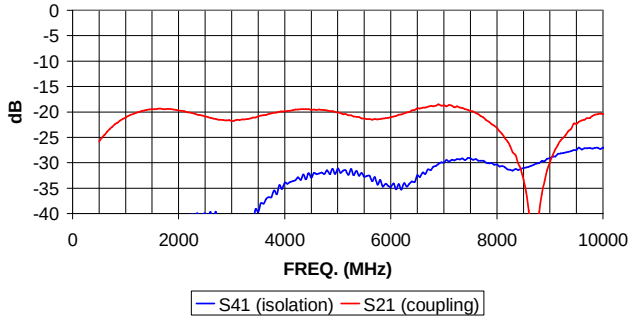
Forward Transmission
(on Rogers RO4003C-16mil with and without external matching applied)



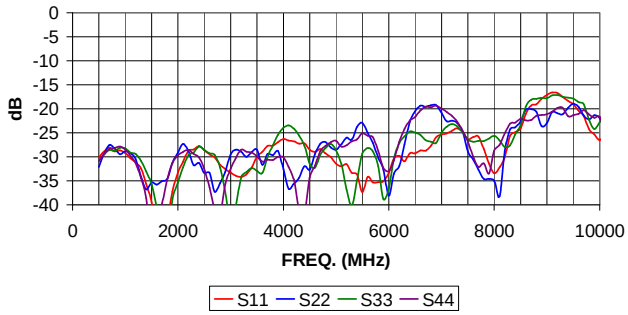
Directivity
(on Rogers RO4003C-16mil with and without external matching applied)



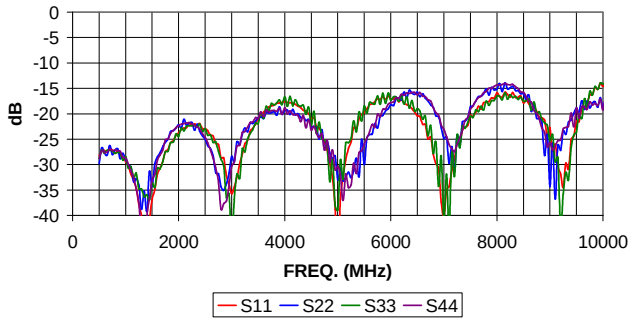
COUPLING and ISOLATION
(on Rogers RO4003C-16mil)



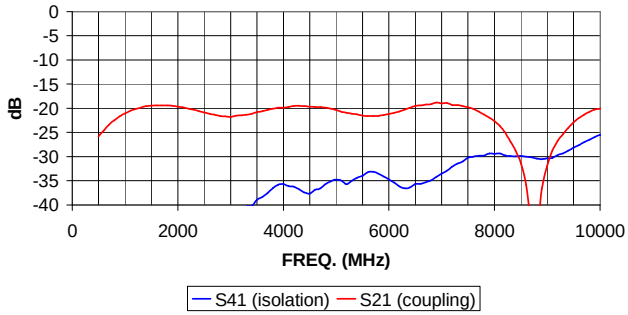
Port Reflection
(on Rogers RO4003C-16mil with external matching applied)



Port Reflection
(on Rogers RO4003C-16mil)



COUPLING and ISOLATION
(on Rogers RO4003C-16mil with external Matching applied)



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