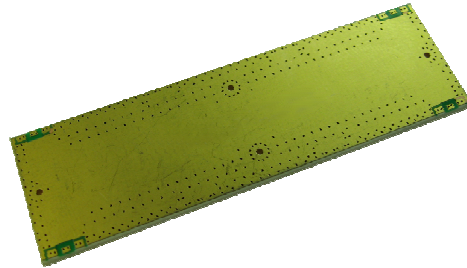


Datasheet

Features:

- ▶ ITAR-Free
- ▶ Excellent Performance
- ▶ Wide Bandwidth
- ▶ Small Size, Surface Mount
- ▶ Building Block For:
 - Power Amplifiers
 - Image Rejection Mixers
 - I & Q / SSB Modulators
 - Phase Shifters & More...



Specifications:	With ext. Matching Structure	Without Matching
Frequency	1000-8000 MHz	
Amplitude Imbalance(Typ/Max)	0.3dB ¹ /0.2dB ²	0.4dB ¹ /0.3dB ²
Phase Error(Typ/Max)	2°	4°
Insertion Loss(Typ/Max)	0.7dB ¹ /0.6dB ²	1.3dB ¹ /1.2dB ²
Insertion Loss Ripple	0.7dB ¹ /0.6dB ²	1.1dB ¹ /1.0dB ²
Isolation(Typ/Min)	17dB ¹ /20dB ²	10dB ¹ /15dB ²
Input Power Rating	50 W	
VSWR(Typ/Max)	1.2dB ¹ /1.17dB ²	1.7dB ¹ /1.4dB ²
Operating Temp	-40 to +85 °C	

¹ Performance on RO4003C, 16mil mainboard

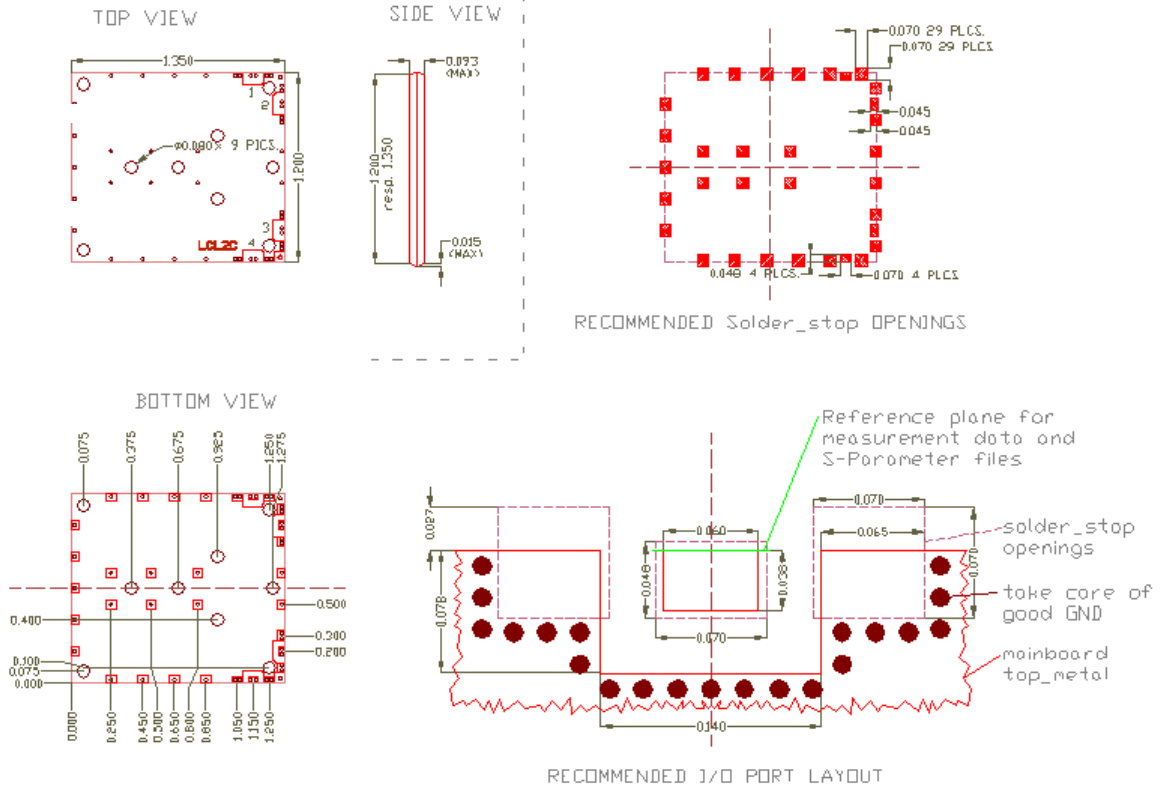
² Performance on RO4003C, 16mil with external matching circuit applied (see Recommended Port Layout)

Phasing Diagram:

in \ out	1	2	3	4
1		thru	90°	iso
2	thru		iso	90°
3	90°	iso		thru
4	iso	90°	thru	

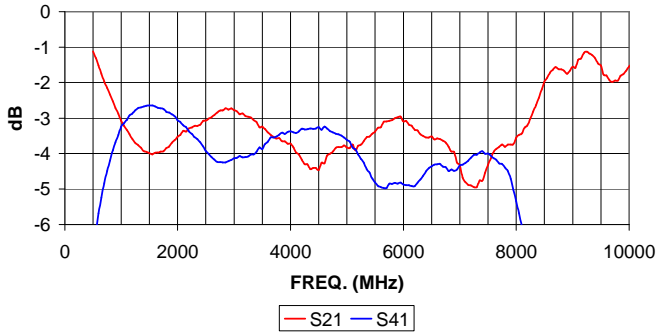
* for port numbering see outline drawing

Outline Drawing:

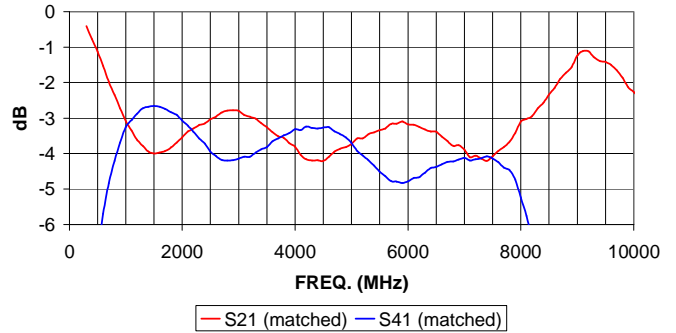


Performance Plots:

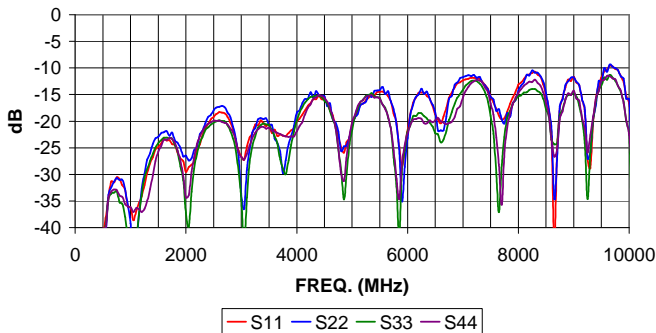
Insertion Loss
(on Rogers RO4003C-16mil)



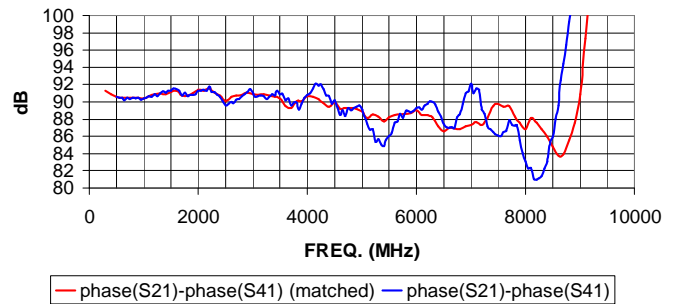
Insertion Loss
(on Rogers RO4003C-16mil with external matching applied)



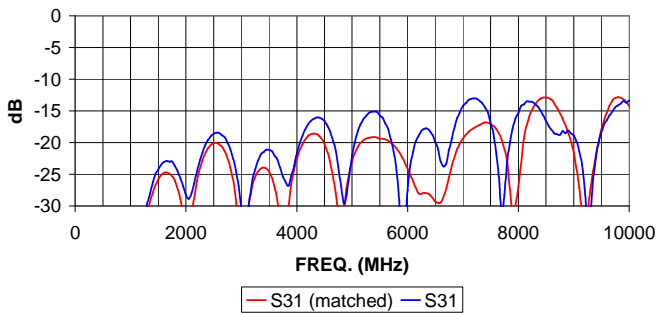
Return Loss
(on Rogers RO4003C-16mil)



Phase Unbalance
(on Rogers RO4003C-16mil with external Matching applied)



ISOLATION
(on Rogers RO4003C-16mil with and without external Matching applied)



Return Loss
(on Rogers RO4003C-16mil with external Matching applied)

