

Xinger®

Micro Xinger 10dB Directional Coupler



Description

The 1M810S Micro Xinger® is a low profile, miniature 10dB directional coupler in an easy to use surface mount package designed for U-NII, ISM and hyperLAN applications. The 1M810S is for power and frequency detection as well as power injection and is an ideal solution for the ever-increasing demands of the wireless industry for smaller printed circuit boards and high performance. Parts have been subjected to rigorous qualification testing and units are 100% tested. They are manufactured using materials with x and y thermal expansion coefficients compatible with common substrates such as FR4, G-10 and polyamide.

Features:

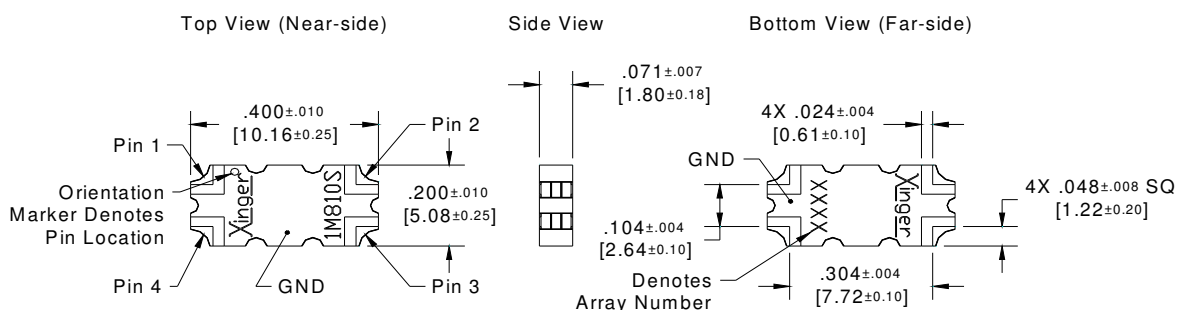
- 5.0 – 6.0 GHz
- Very Low Loss
- High Directivity
- Surface Mountable
- Tape And Reel
- New Micro-Package
- Lead-Free
- RoHS Compliant
- 100% Tested

ELECTRICAL SPECIFICATIONS**

Frequency	Mean Coupling	Insertion Loss	VSWR	Freq. Sensitivity
GHz	dB	dB Max	Max : 1	dB Max
5.0 – 6.0	10.0 ± .75	0.30	1.33	± .30
Directivity	Power Handling	⊙JC	Operating Temp.	
dB Min	Watts	°C / Watt	°C	
18	15	23.8	-55 to +85	

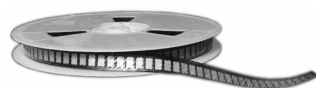
**Specification based on performance of unit properly installed on microstrip printed circuit boards with 50 Ω nominal impedance. Specifications subject to change without notice.

Outline Drawing

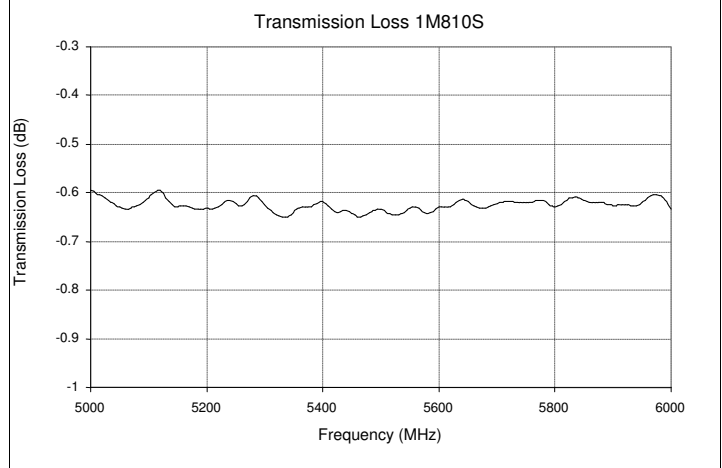
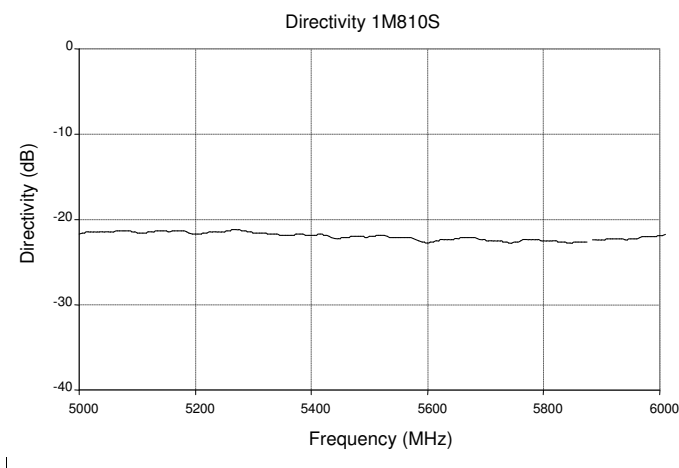
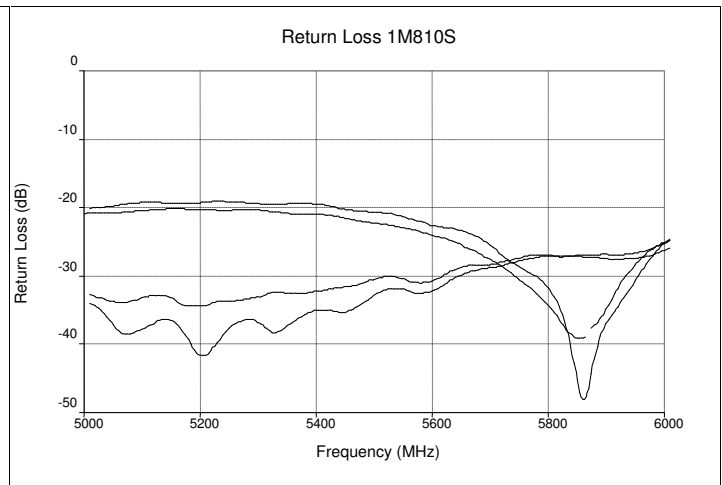
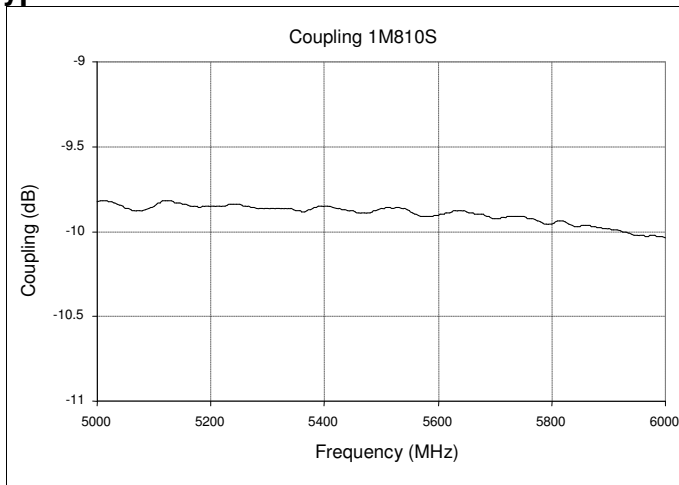


Dimensions are in Inches [Millimeters]
1M810S Rev A Mechanical Outline

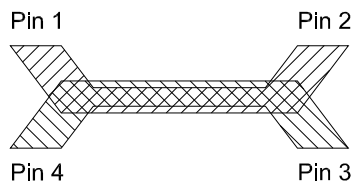
Tolerances are Non-Cumulative



Typical Performance: 5.0 GHz. to 6.0 GHz.



Pin Configuration

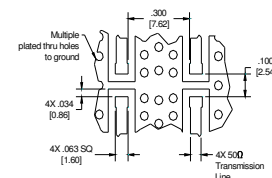
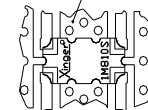


Directional Coupler Pin Configuration

	Pin 1	Pin 2	Pin 3	Pin 4
Configuration #1	Input	Output	Isolated	Coupled
Configuration #2	Output	Input	Coupled	Isolated
Configuration #3	Isolated	Coupled	Input	Output
Configuration #4	Coupled	Isolated	Output	Input

Mounting Footprint

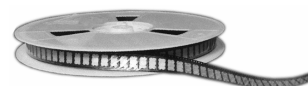
To ensure proper electrical and thermal performance there must be a ground plane with 100% solder connection underneath the part



Dimensions are in Inches (Millimeters)
1M810S Rev A Mounting Footprint

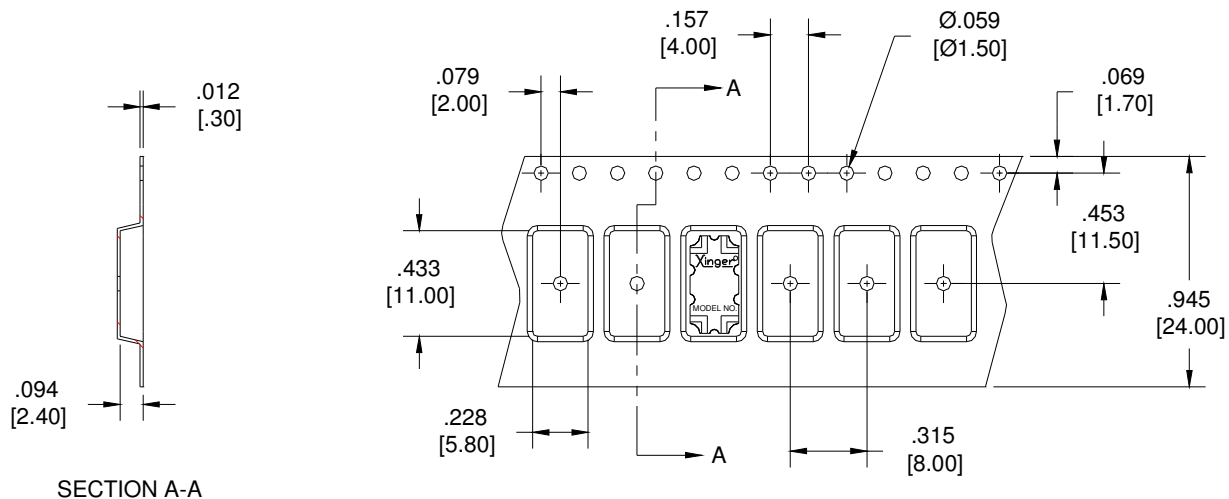
USA/Canada: (315) 432-8909
Toll Free: (800) 544-2414
Europe: +44 2392-232392

Available on Tape and Reel For Pick and Place Manufacturing.



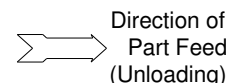
Carrier Tape

Parts are oriented in embossed tape as shown below

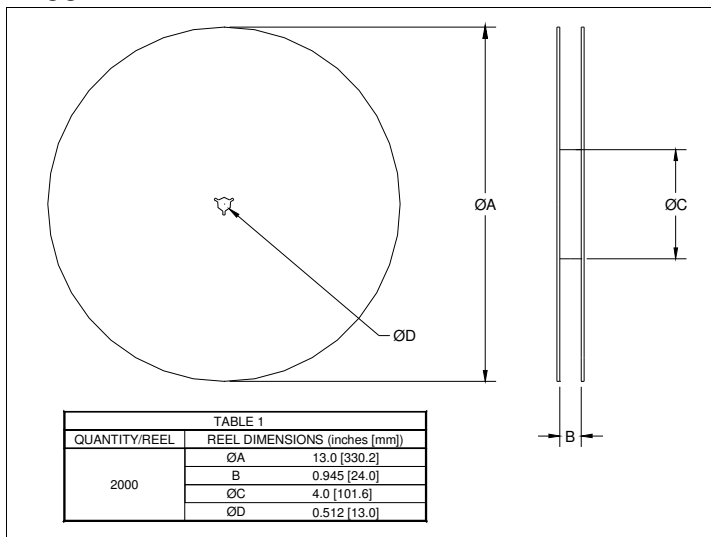


SECTION A-A

Dimensions are in inches [mm]



Reel



- Parts are available in both reel and tube
- Quantity of 48 parts available per tube

