



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:

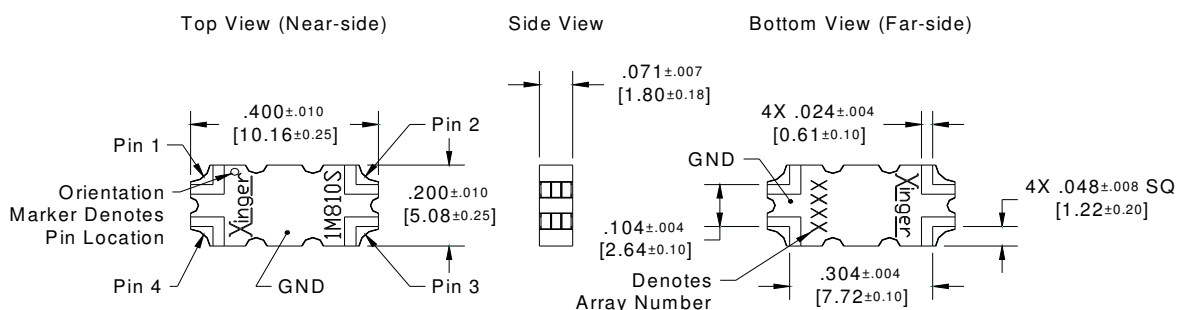
- **5.0 – 6.0 GHz**
- **Very Low Loss**
- **High Directivity**
- **Surface Mountable**
- **Tape And Reel**
- **New Micro-Package**
- **Lead-Free**
- **RoHS Compliant**
- **100% Tested**

ELECTRICAL SPECIFICATIONS**

Frequency <i>GHz</i>	Mean Coupling <i>dB</i>	Insertion Loss <i>dB Max</i>	VSWR <i>Max : 1</i>	Freq. Sensitivity <i>dB Max</i>
5.0 – 6.0	10.0 ± .75	0.30	1.33	± .30
Directivity <i>dB Min</i>	Power Handling <i>Watts</i>	⊙JC <i>°C / Watt</i>	Operating Temp. <i>°C</i>	
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.

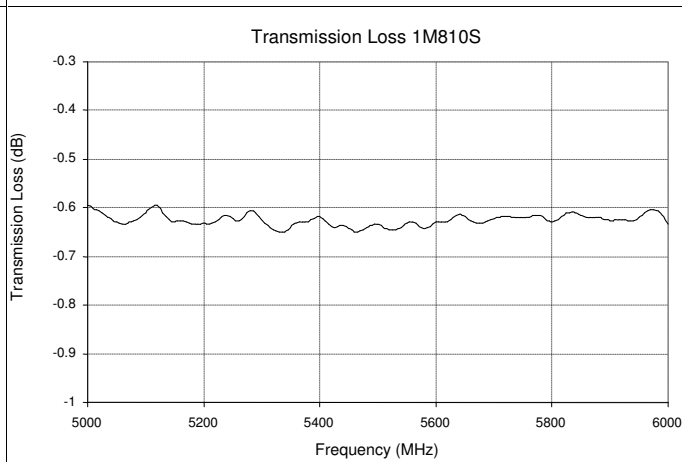
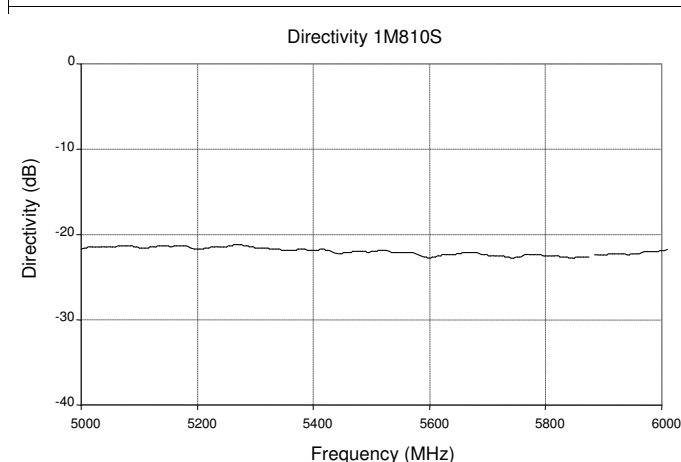
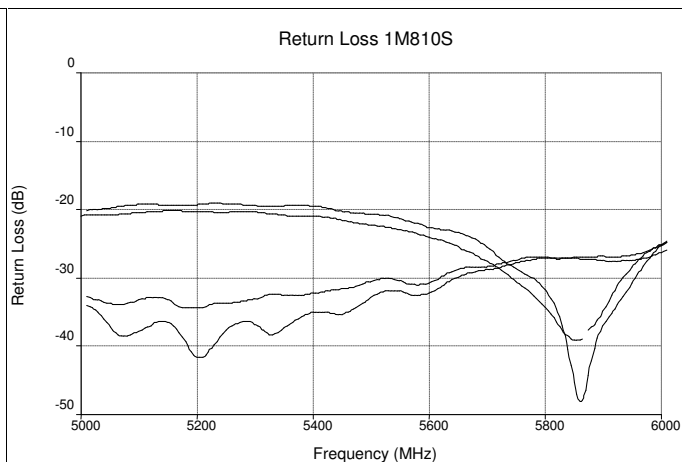
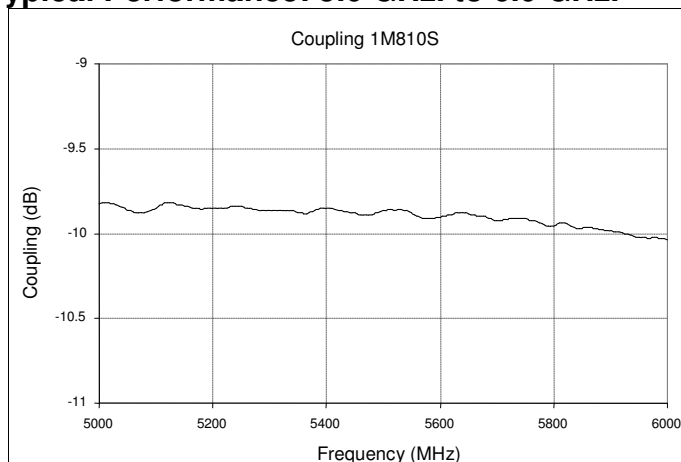
Outline Drawing



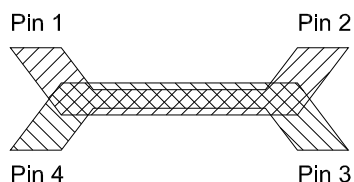
Dimensions are in Inches [Millimeters]
1M810S Rev A Mechanical Outline

Tolerances are Non-Cumulative

Typical Performance: 5.0 GHz. to 6.0 GHz.



Pin Configuration

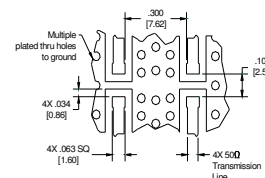
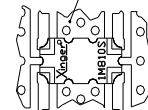


Directional Coupler Pin Configuration

	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

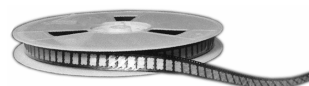
To ensure proper electrical and thermal performance there must be a ground plane with 100% solder connection underneath the part



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.

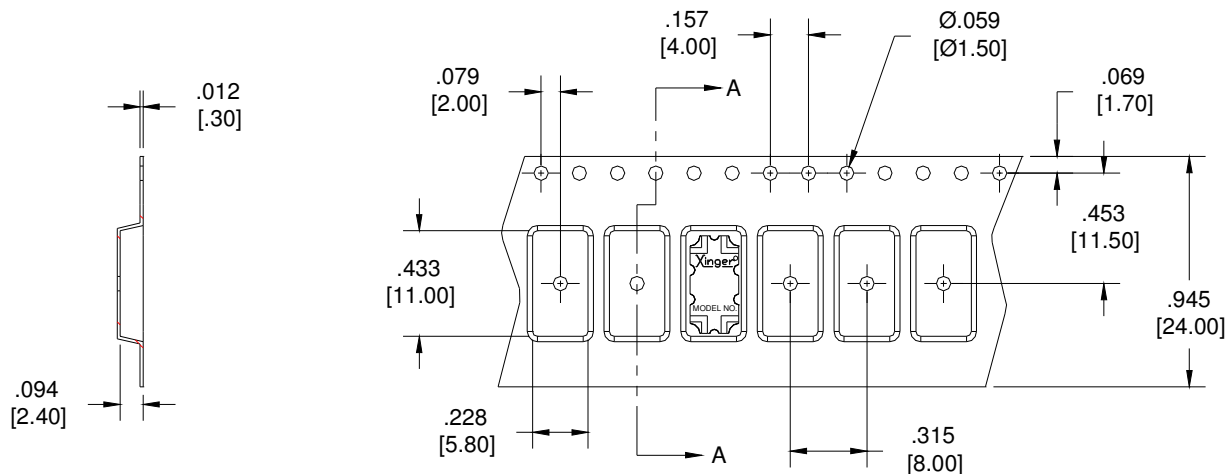


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What'll we think of next

Carrier Tape

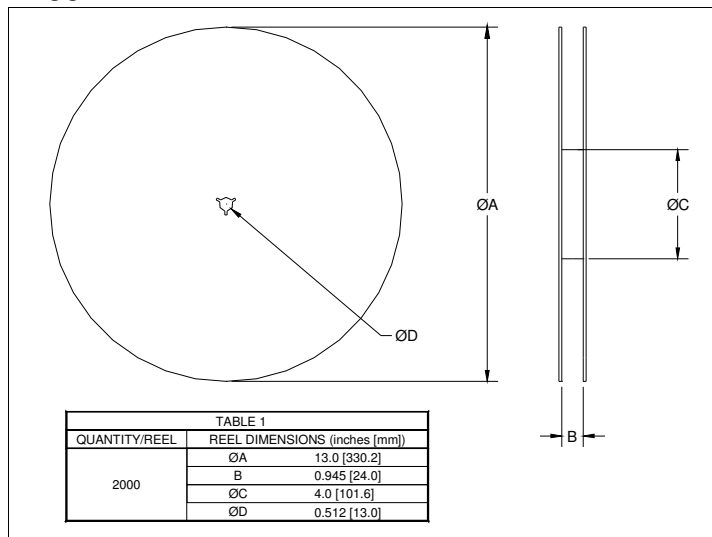
Parts are oriented in embossed tape as shown below



Dimensions are in inches [mm]

Direction of
Part Feed
(Unloading)

Reel



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

