

Xinger[®]

**Micro Xinger
3dB Hybrid Coupler**

Description:

The 1M803 Micro Xinger[®] is a low profile, miniature 3dB hybrid coupler in an easy to use surface mount package designed for U-NII, ISM and hyper LAN applications. The 1M803 is designed for balanced amplifiers and signal distribution 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 and G-10. Available in both 5 of 6 tin lead (1M803) and 6 of 6 RoHS compliant tin immersion (1M803S).



Features:

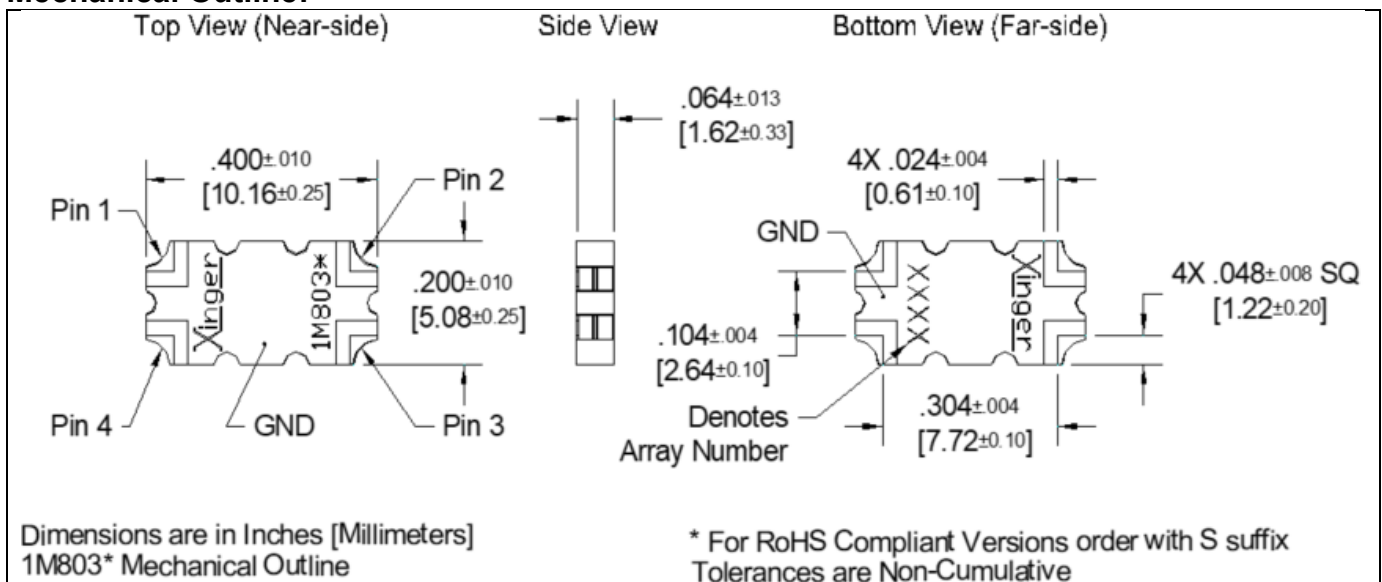
- Very Low Loss
- High Isolation
- 90° Quadrature
- Surface Mountable
- Tape And Reel
- Available in Lead-Free (as illustrated) or Tin-Lead

Electrical Specifications**

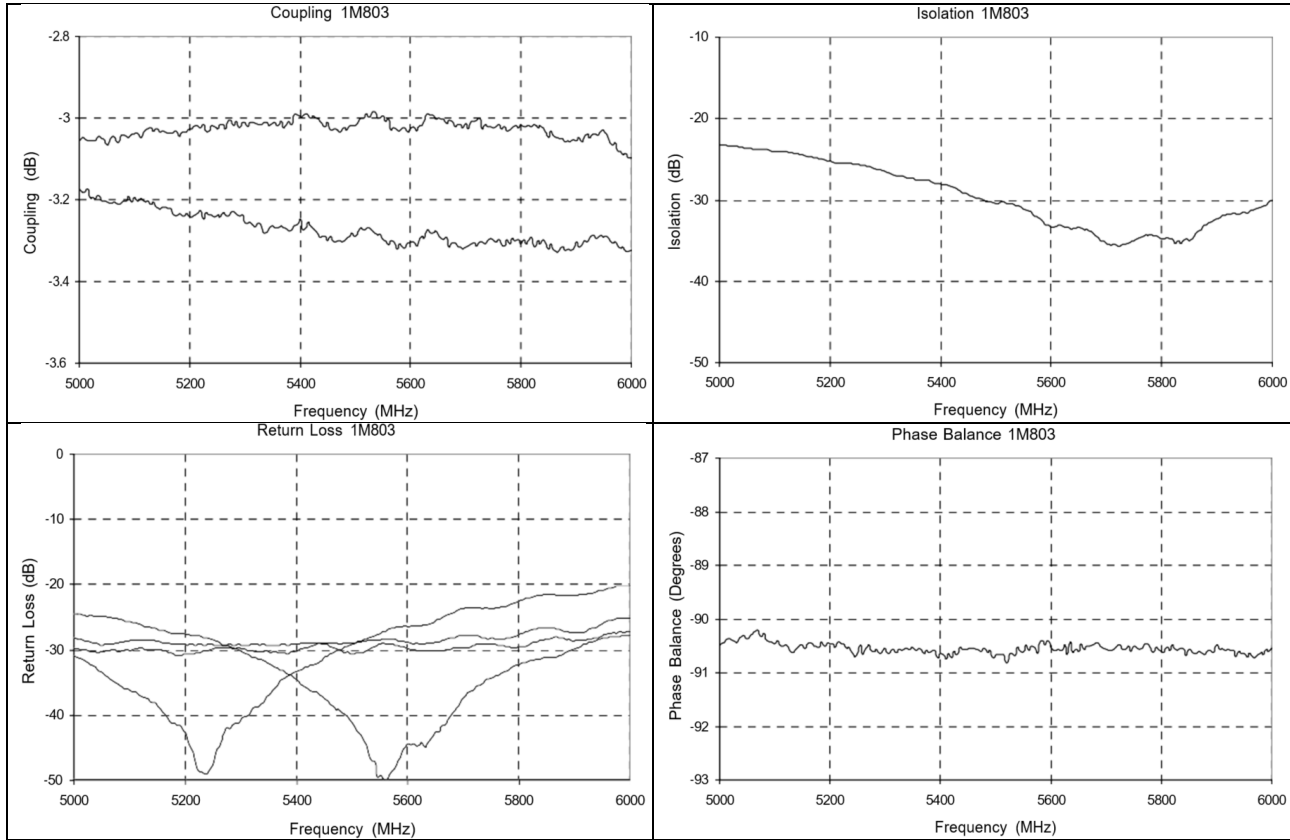
Frequency	Isolation	Insertion Loss	VSWR		
GHz	dB Min	dB Max	Max:1		
5.0 – 6.0	20	0.25	1.21		
4.8 – 6.0	20	0.25	1.21		
Amplitude Balance	Phase Balance	Power	⊖JC	Operating Temp.	
dB Max	Degrees	Ave. CW Watts	°C/Watt	°C	
± 0.30	± 3	20	78.1	-55 to +85	
± 0.40	± 3.5				

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

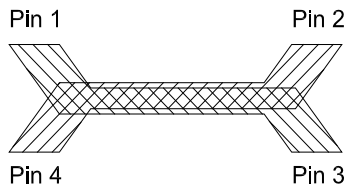
Mechanical Outline:



Typical Performance 5.0 GHz. to 6.0 GHz

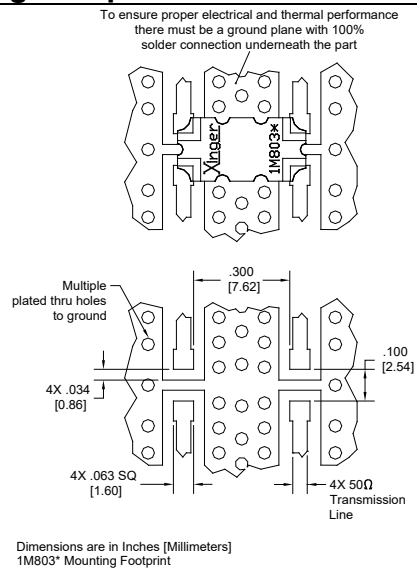


Pin Configuration



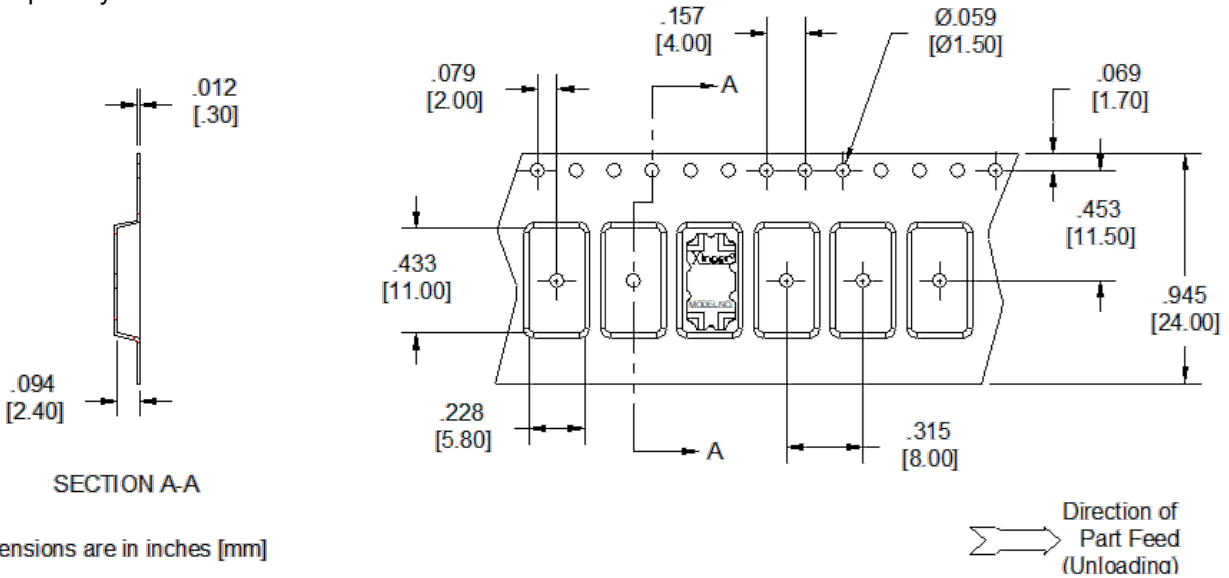
Hybrid Coupler Pin Configuration				
	Pin 1	Pin 2	Pin 3	Pin 4
Configuration #1	Input	Isolated	-3dB, -90°	-3dB, 0°
Configuration #2	Isolated	Input	-3dB, 0°	-3dB, -90°
Configuration #3	-3dB, -90°	-3dB, 0°	Input	Isolated
Configuration #4	-3dB, 0°	-3dB, -90°	Isolated	Input

Mounting Footprint



Packaging and Ordering Information:

Packaging follows EIA-481-2. Parts available in tape and reel. Contact Customer service for minimum reel order quantity.



Dimensions are in inches [mm]

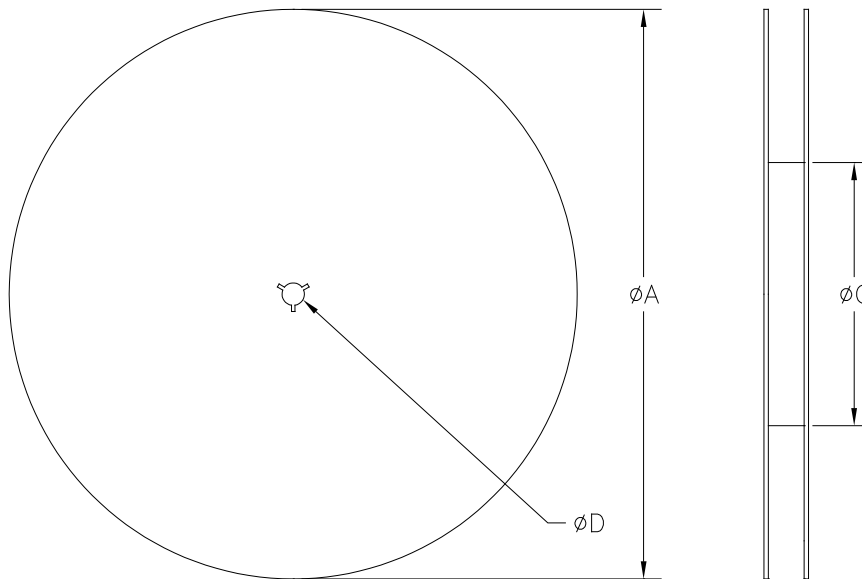


TABLE 1	
REEL DIMENSIONS (inches [mm])	
ØA	13.3 [333.0]
B	0.945 [24.0]
ØC	4.017 [102.03]
ØD	0.512 [13.0]

Contact us:
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