

Xinger®

Micro Xinger 10dB Directional Coupler



Description

The 1M710 Micro Xinger® is a low profile, miniature 10dB directional coupler in an easy to use surface mount package designed for ISM and LMDS applications. The 1M710 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. Available in both 5 of 6 tin lead (1M710) and 6 of 6 RoHS compliant tin immersion (1M710S).

Features:

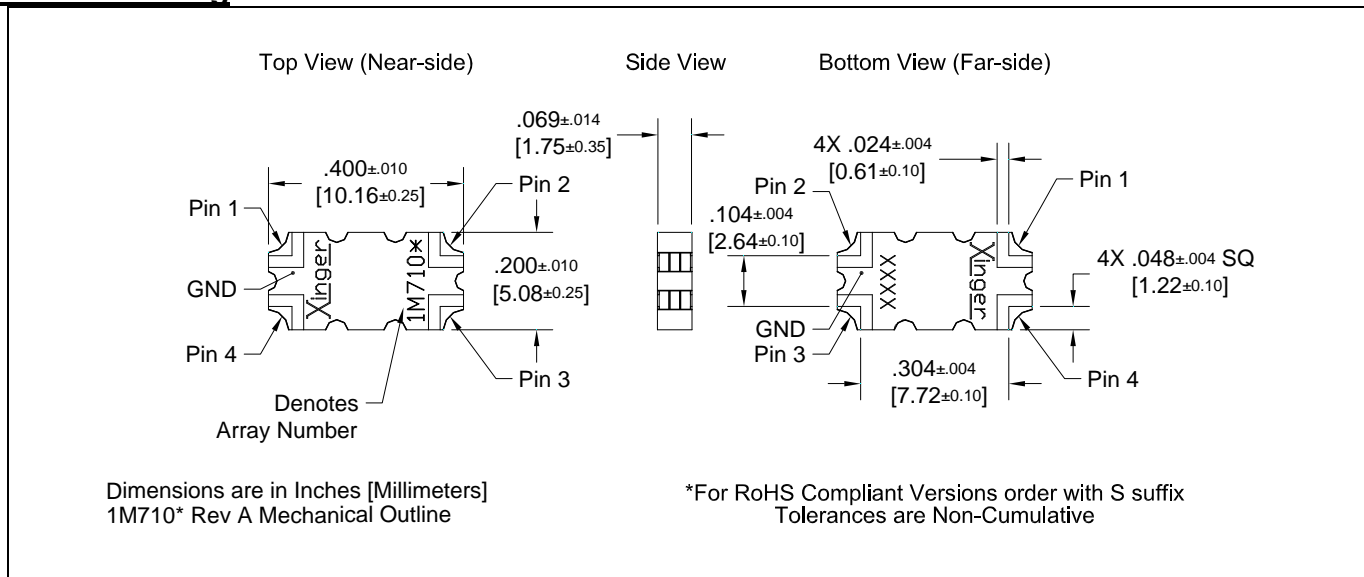
- 3.3 – 3.7 GHz
- Very Low Loss
- High Directivity
- Surface Mountable
- Tape And Reel
- Available in Lead-Free (as illustrated) or Tin-Lead

ELECTRICAL SPECIFICATIONS**

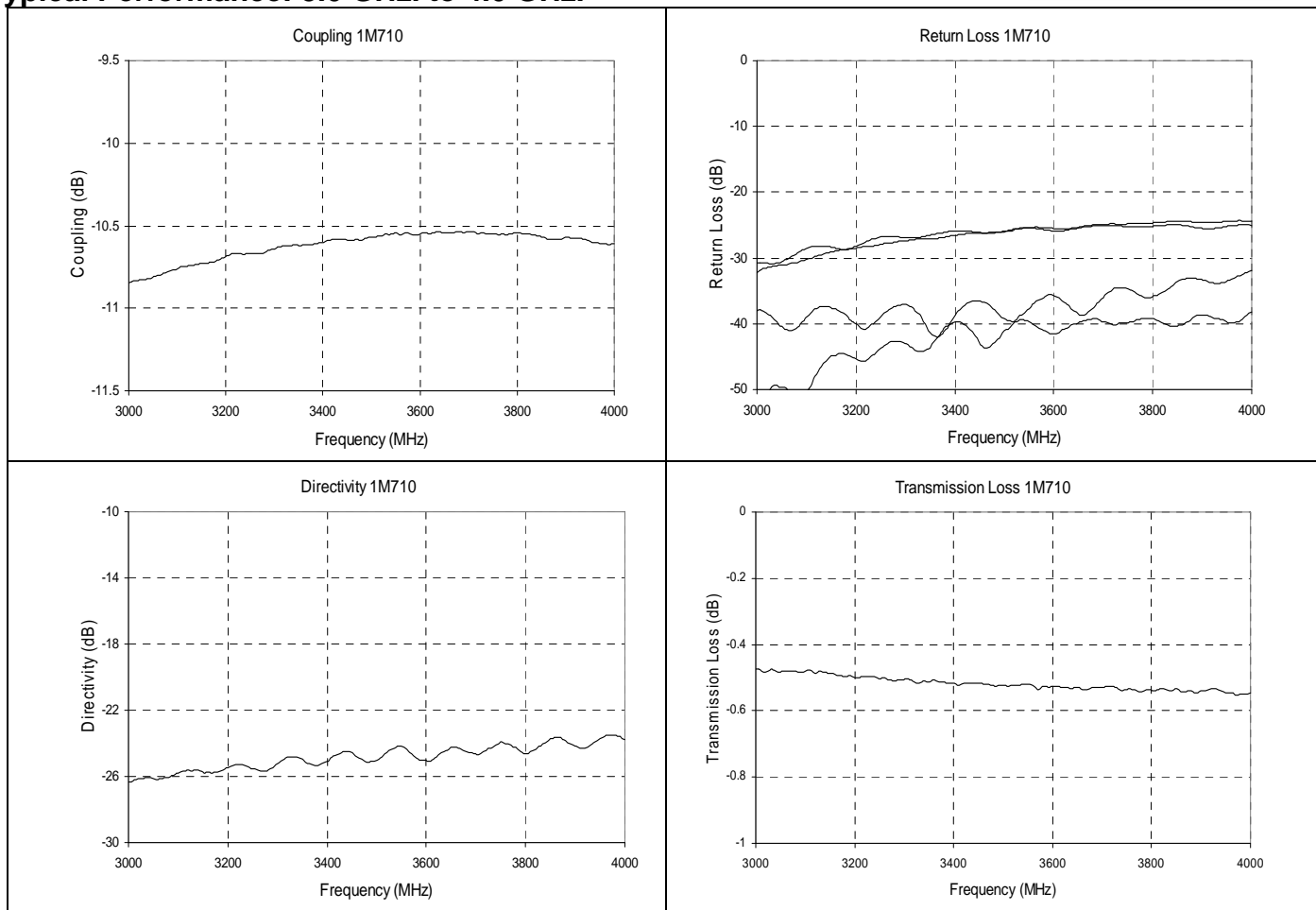
Frequency	Mean Coupling	Insertion Loss	VSWR	Freq. Sensitivity
GHz	dB	dB Max	Max : 1	dB Max
3.3 – 3.7	10.5 ± 0.8	0.25	1.20	± 0.2
Directivity	Power Handling	ΘJC	Operating Temp.	
dB Min	Watts	°C / Watt	°C	
20	22	34.4	-55 to +85	

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

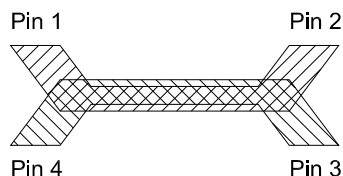
Outline Drawing



Typical Performance: 3.0 GHz. to 4.0 GHz.



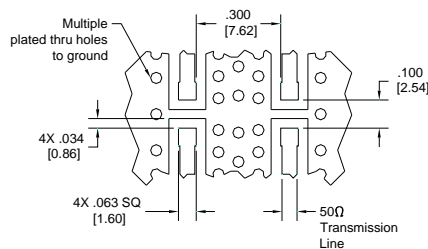
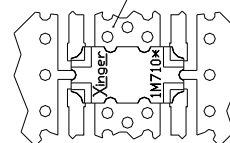
Pin Configuration



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]
1M710 Rev A Mounting Footprint

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

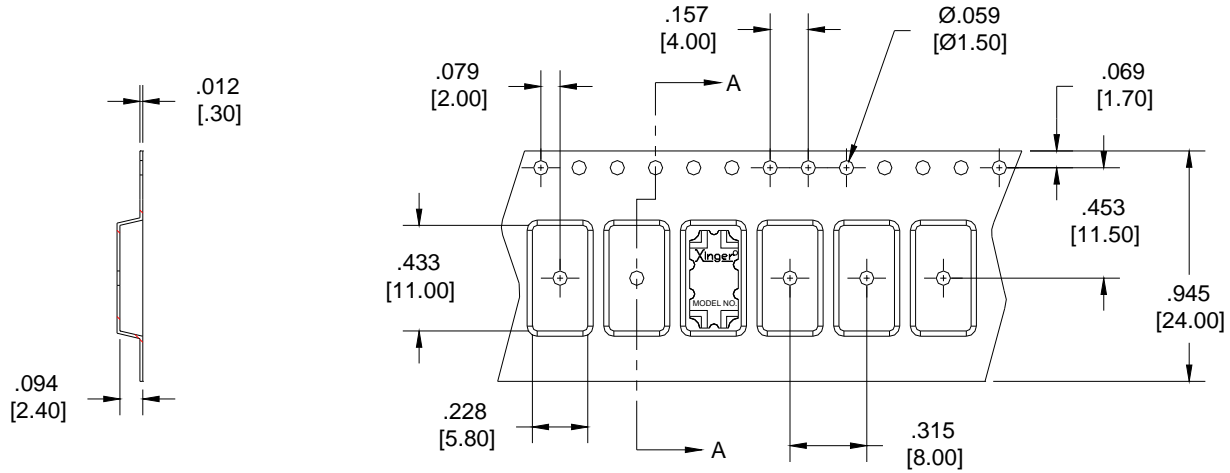
Available on Tape and Reel For Pick and Place Manufacturing.





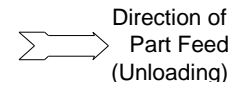
PACKAGING

Packaging follows EIA-481-2. Parts are oriented in tape as shown below. Minimum order quantities are 2000 per reel and 48 per tube.



SECTION A-A

Dimensions are in inches [mm]



Tape and Reel Diagram

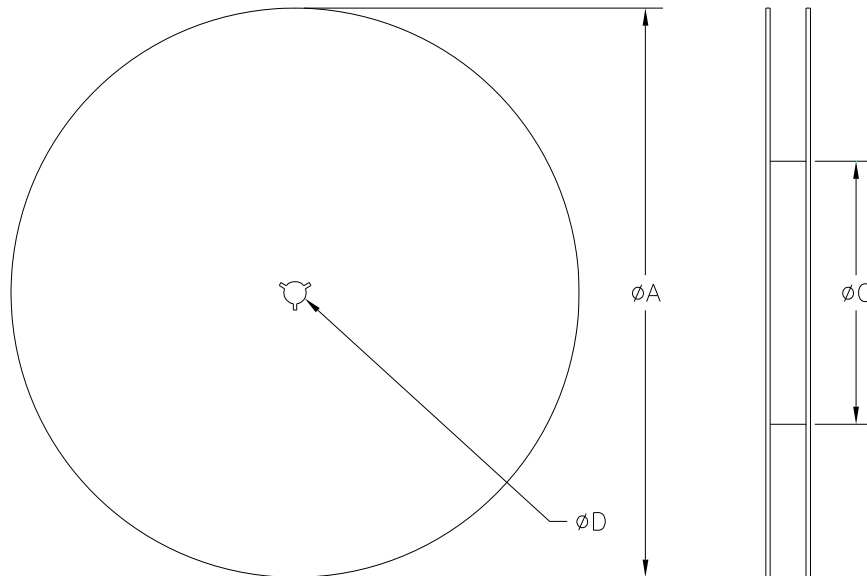


TABLE 1	
REEL DIMENSIONS (inches [mm])	
ØA	13.3 [333.0]
B	0.945 [24.0]
ØC	4.017 [102.03]
ØD	0.512 [13.0]

