



**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 6 of 6 RoHS compliant tin immersion (1M710S).



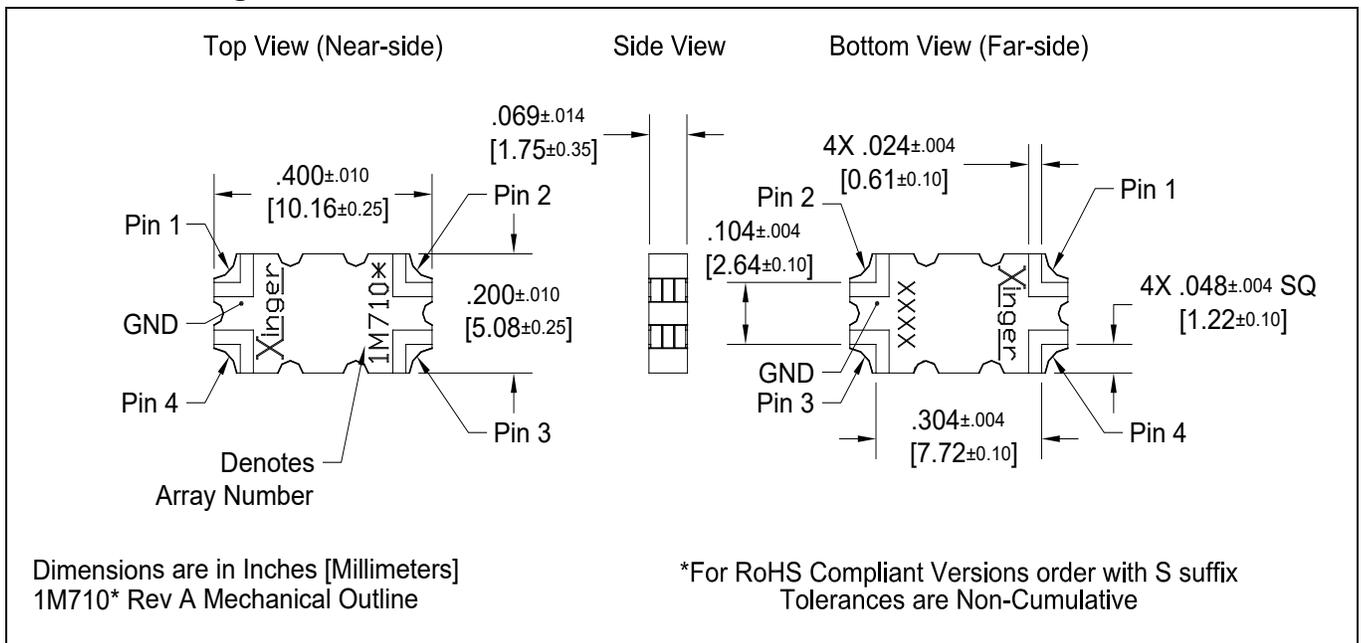
**Electrical Specifications\*\***

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	

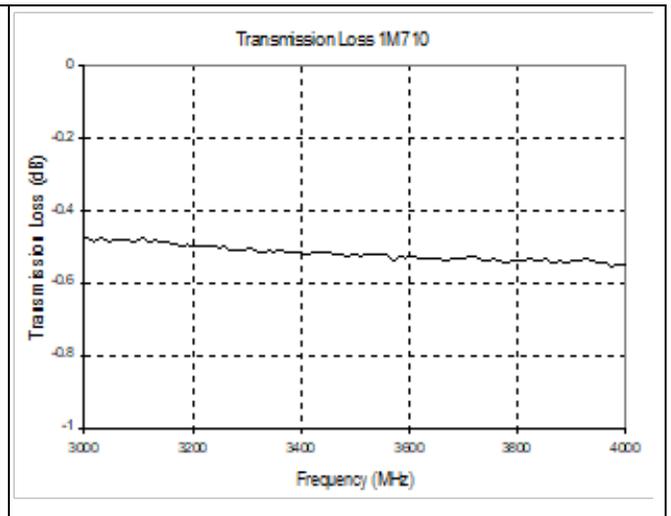
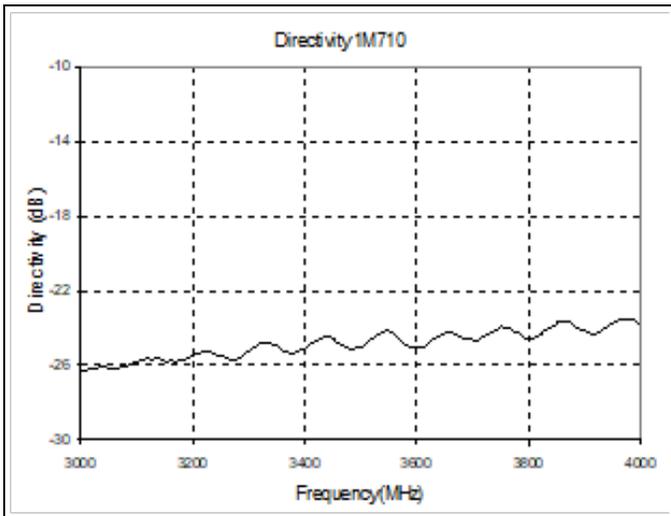
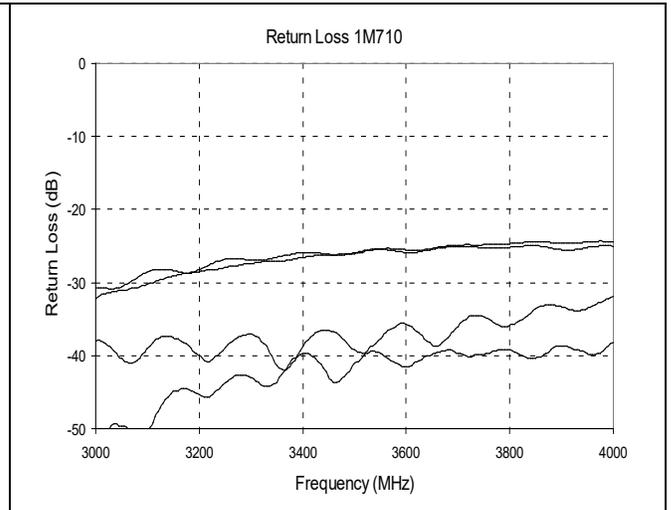
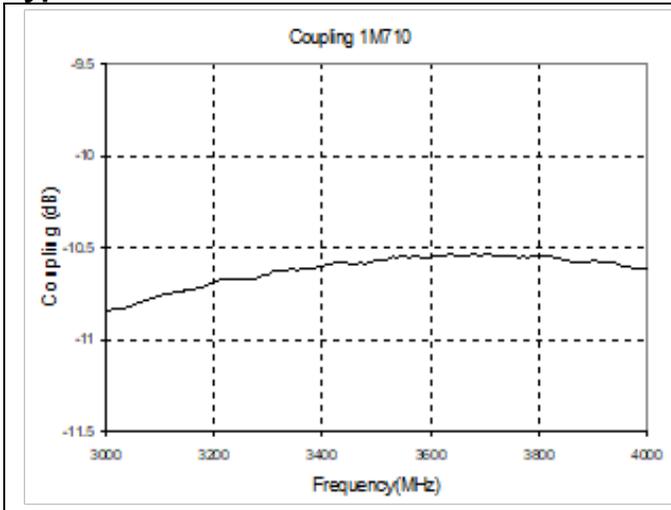
**Features:**

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

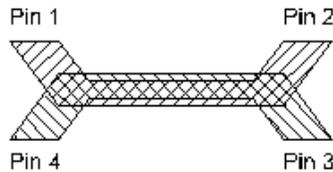
**Outline Drawing:**



**Typical Performance 3.0 GHz. to 4.0 GHz**



**Pin Configuration**

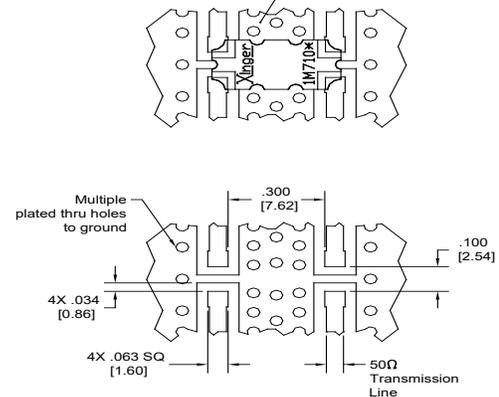


Directional Coupler Pin Configuration

	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**

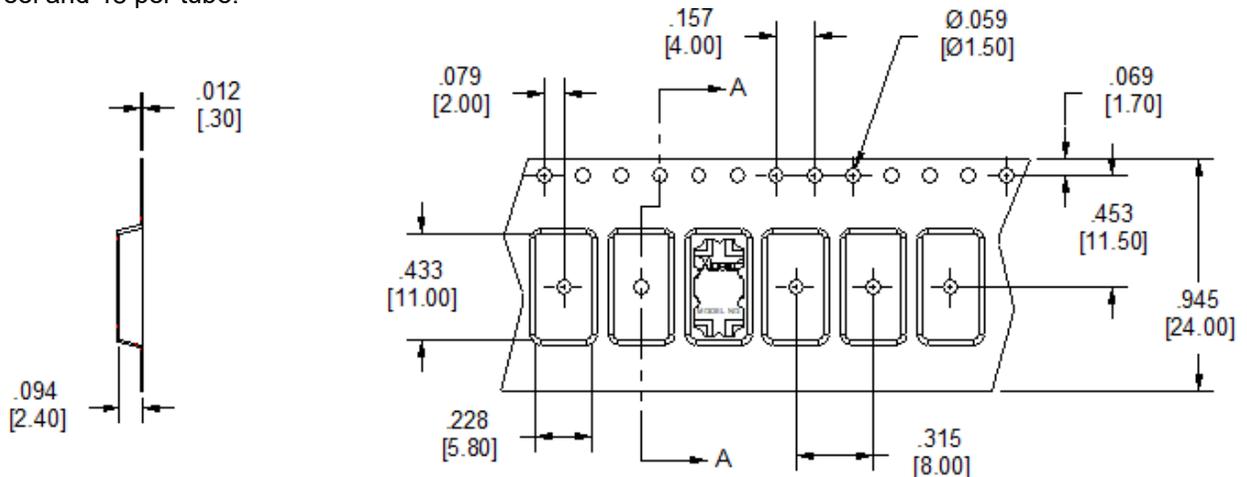
To ensure proper electrical and thermal performance there must be a ground plane with 100% solder connection underneath the part



Dimensions are in Inches [Millimeters]  
1M710\* Rev A Mounting Footprint

**Packaging and Ordering Information:**

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]

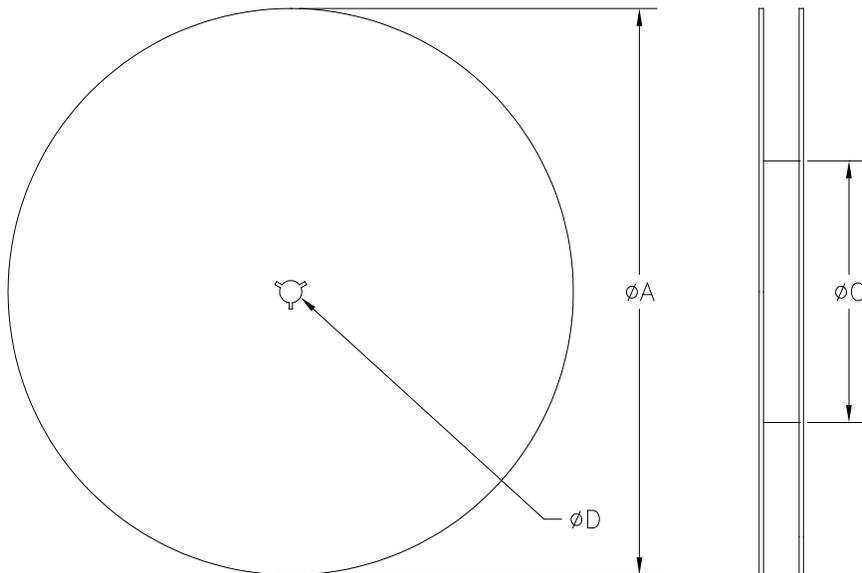
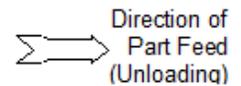


TABLE 1	
REEL DIMENSIONS (inches [mm])	
ØA	13.3 [333.0]
B	0.945 [24.0]
ØC	4.017 [102.03]
ØD	0.512 [13.0]