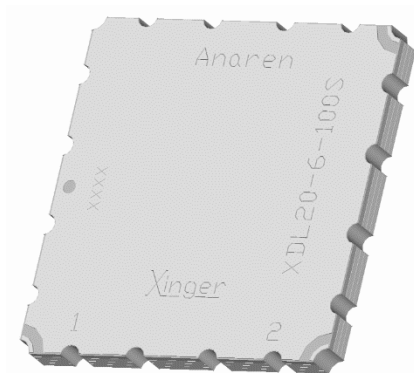


Xinger[®]

Delay Line

Description:

The XDL20-6-100 is a surface mount delay line that uses a slow wave coupling structure that maximizes the amount of delay per unit area over other distributed delay structures. The XDL20-6-100 can be used in amplifier linearization applications from 850 – 2000 MHz. The XDL20-6-100 is ideal for the delay element required in the main loop of feed forward amplifiers. The Xinger[®] delay lines are a low cost, high quality alternative to the traditional coaxial and filter solutions presently available. Parts have been subjected to rigorous qualification testing and units are 100% tested. Available 6 of 6 tin immersion (XDL20-6-100S) RoHS compliant finishes.



Electrical Specifications:

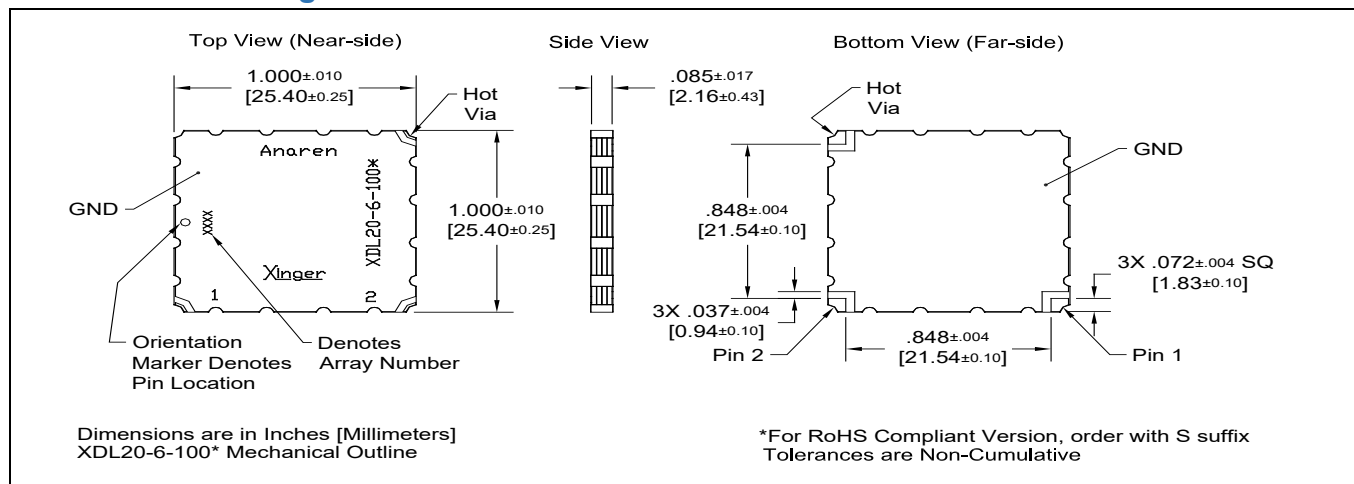
Features:

- Production Friendly
- Consistent Delay
- Stable over Temperature
- Surface Mountable
- Available in Tape&Reel
- Non-Lead Solder Paste Compatible
- Available in Lead-Free (as illustrated) or Tin-Lead
- 100% Tested

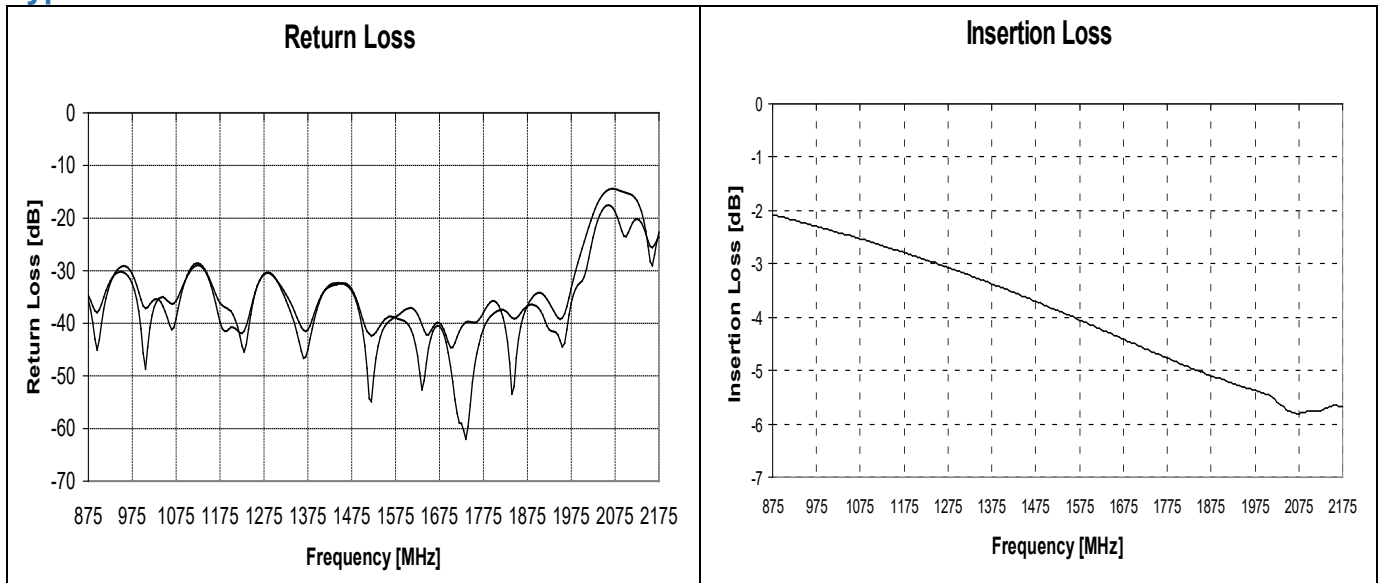
Frequency (MHz.)	869-894 AMPS Band	925-960 GSM Band	1805-1880 DCS Band	1930-1990 PCS Band
Mean Delay (nS)	5.64 ±0.11	5.76±0.11	9.42±0.19	9.82±0.20
Deviation from Linear Phase (Degrees Max)	±1.00	±1.00	±2.00	±2.00
Amplitude Flatness (dB p-p)	0.10	0.15	0.30	0.25
Return Loss (dB min)	20	20	20	20
Insertion Loss (dB/nS)	0.45	0.45	0.60	0.65
Power Handling (Watts)	1	1	1	1
Operating Temp. (°C)	-55 to +85	-55 to +85	-55 to +85	-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.

Mechanical Drawing:



Typical Performance: 875 to 2175MHz

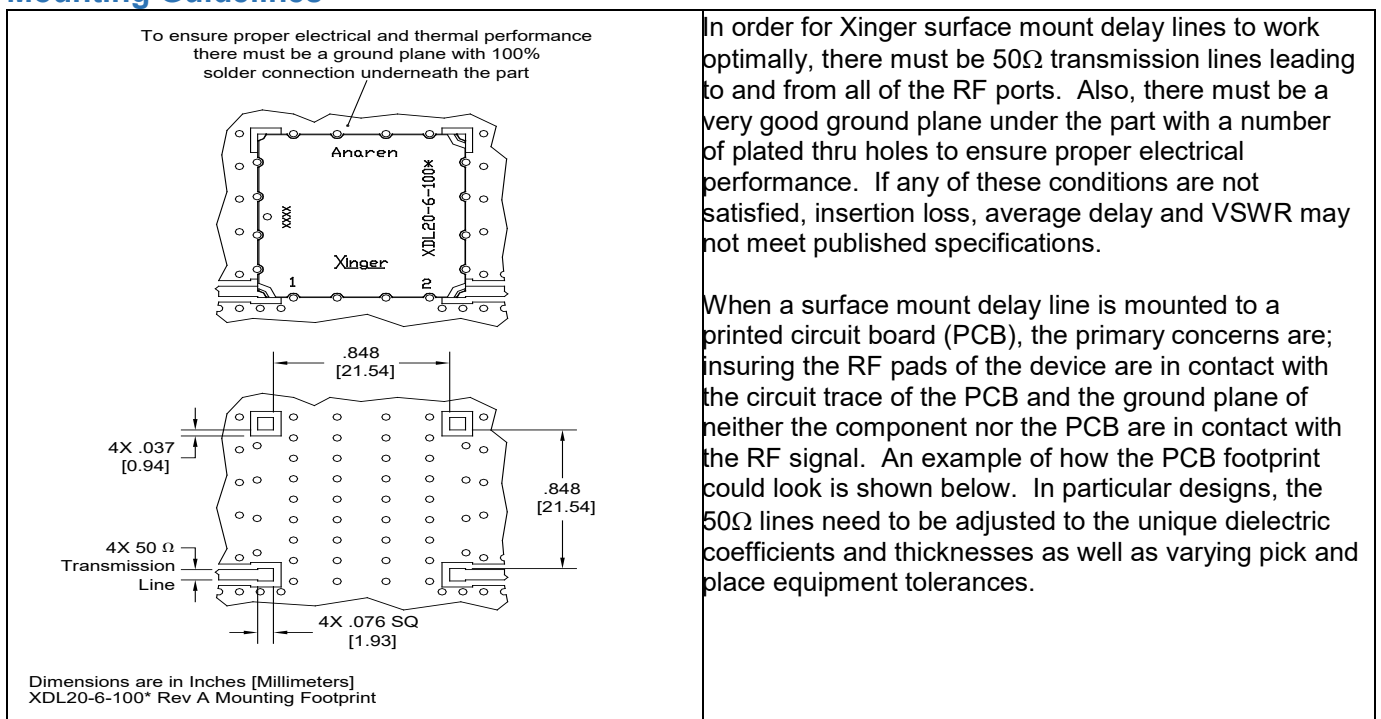


Average Delay

The average delay is defined as the group delay of the input signal through the delay line. Because the Xinger delay lines take advantage of a narrow band tuning technique, the average delay over the broad band varies. The lot-to-lot variation is reflected in the plus/minus tolerance given in specifications.

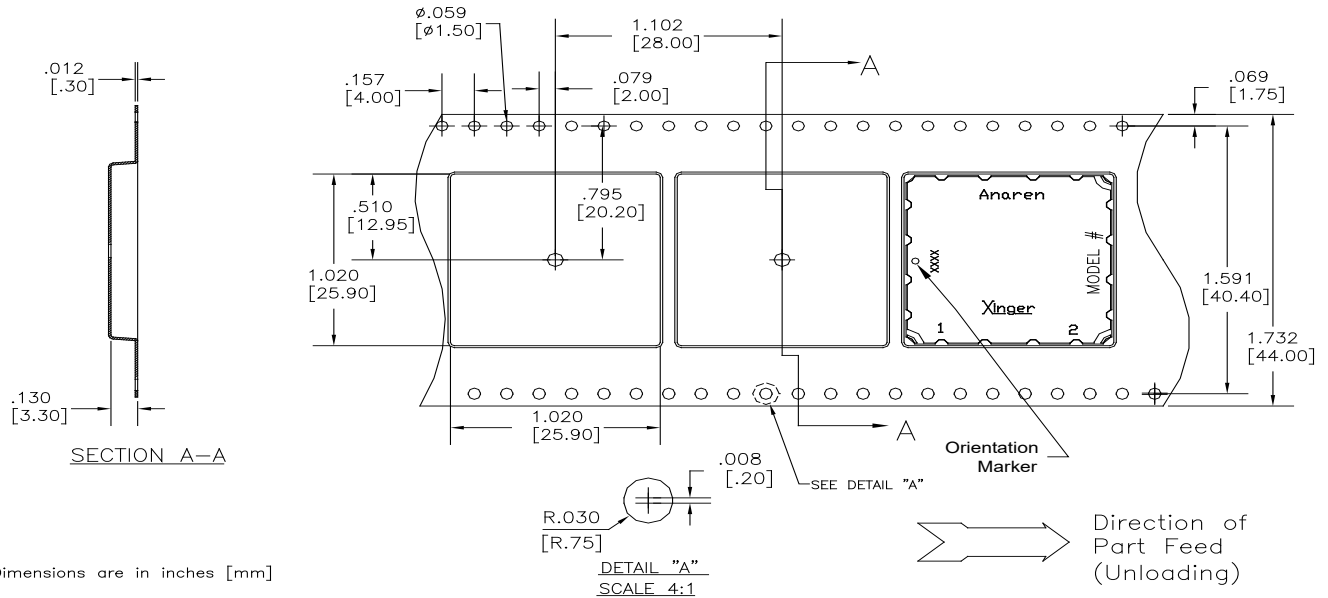
Refer to TTM Application Note AAN-232 for further information on Xinger delay lines.

Mounting Guidelines



Packaging and Ordering Information:

Parts are available in both reel and tube. Packaging follows EIA 481-2. Parts are oriented in tape and reel as shown below. Minimum order quantities are 350 per reel and 23 per tube.



REEL

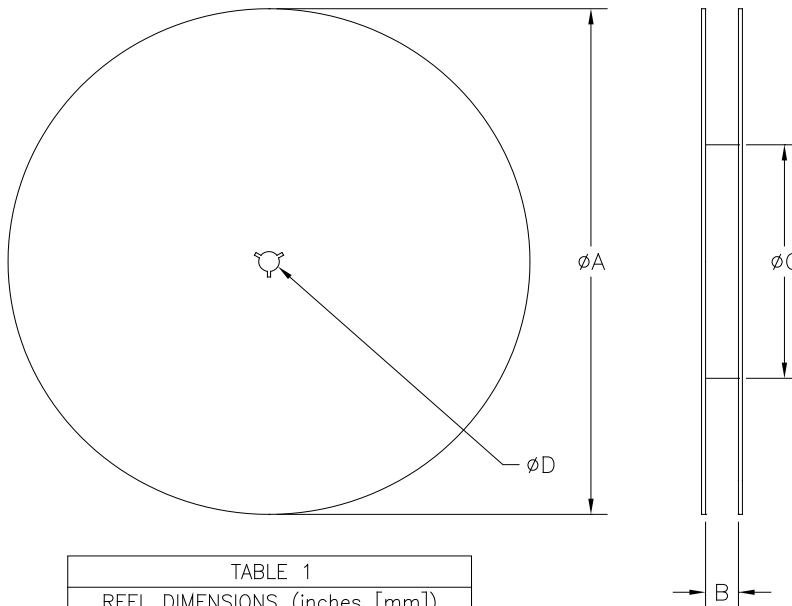


TABLE 1 REEL DIMENSIONS (inches [mm])	
ϕA	13.3 [333.0]
B	1.732 [44.0]
ϕC	7.00 [177.8]
ϕD	0.512 [13.0]

Contact us:
rf&s_support@ttm.com