

# **Coaxial Delay Lines**



### **Key Features**

• Frequency Range: DC to 6 GHz

• Delay: 1 nSec to 250 nSec

• Insertion Loss: 0.2 dB - 50 dB

• Stability: 0.15 PPM/degC

• Bandwidth: DC – 6 GHz

• Package Size: Dependent on frequency and amount of delay

API Technologies' complete line of high frequency Coaxial Delay Lines offer a wide range of semi-standard or custom delay solutions designed to meet customer specifications Utilizing semi-rigid cable, from small diameters, such as .041" up to diameters of .250", API delivers high performance delay lines in a rugged package. Coaxial delay lines can be adjusted by changing the length of the cable and can be heated to improve temperature stability.

Many interface options are offered including SMA (Female and Male), N-Type (Female), TNC (Female), Leaded and SMD. Packaging options include low cost, plastic encapsulated or hermetically welded. Package size is dual in-line to 24".

These delay lines are ideal for applications where high performance and reliability is required. Excellent for usage in transponders and EW target generation application and radar channel matching.

### **Technical Specifications**

Parameter	Unit	Typical	Min/Max
Frequency Range	MHz		0 -6,000
Delay	nSec		1 - 250
Insertion Loss	dB		.2 – 50
Temp Stability	PPM/degC	.15	.00125 heated / unheated
Bandwidth	MHz		0 -6,000
Spurious	dB		70
Triple Travel	dB		70
Feed Through	dB		70

#### **Maximum Ratings**

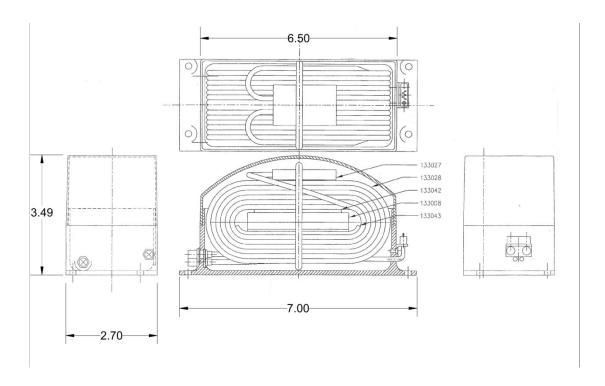
Maximum (No Damage) Ratings			
Storage Temperature(C)	-20 -+100		
Operating Temperature(C)	-20 -+100		
Input Drive @ 25°C (CW) dBm	25		

<sup>\*</sup> Typical values are measured at 25°C, but not guaranteed.

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## **Typical Outline Drawing Heated unit**



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