

## 101166C

## LR160-30-5.5 160 MHz Delay Line 30 MHz Bandwidth

## **Specifications**

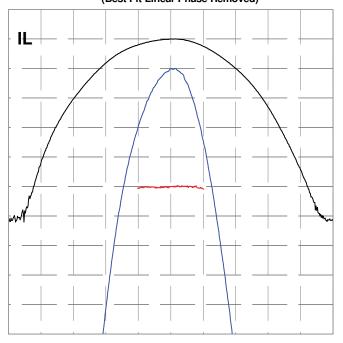
Parameter	Symbol	Min	Typical	Max	Unit
Center Frequency	F <sub>0</sub>		160		MHz
Bandwidth	В		30		MHz
Delay	T <sub>0</sub>	5.48	5.508	5.52	μsec
Insertion Loss	IL		23.3	24.5	dB
Amplitude Ripple			1.9	2.5	dB <sub>P-P</sub>
Phase Ripple			1.1	2.5	deg <sub>P-P</sub>
Spurious for $ t - T_0  > .9T_0$			-58	-52	dB
Substrate Material	128YX-LN				

#### **Notes**

- 1. Center Frequency (F<sub>0</sub>) and Bandwidth (B) are defined, not measured.
- 2. Insertion Loss is the minimum loss for  $|f - F_0| < .5B$
- 3. Ripple spec applies to the  $|f F_0| < .4B$ , and is doubled for  $.4B < |f - F_0| < .5B$
- 4. Specifications are at 22 °C only. Unit will operate undamaged from -54°C to 125°C with shifts  $dF_0 = -x * F_0$ ,  $dT_0 = x * T_0$ , where x = 75E-6 \* (temperature - 22 °C)

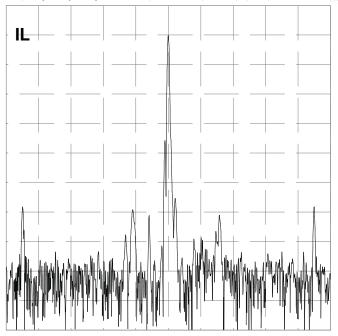
## **Typical Performance**

### **Frequency Response** (Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 13.150 MHz/div

# **Impulse Response**FFT(Frequency Response\*Cos(0.5\*PI\*MIN(1,MAX(0,|f-F0|\*17.2/118-8.6)))^2)



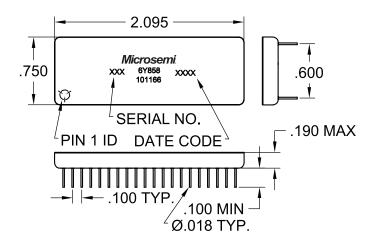
10 dB/div, 0.380 us/div



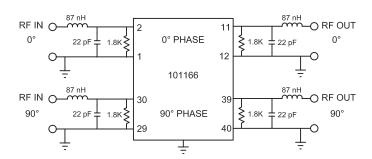
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### **Package Outline**



## Matching





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