

# 101231C

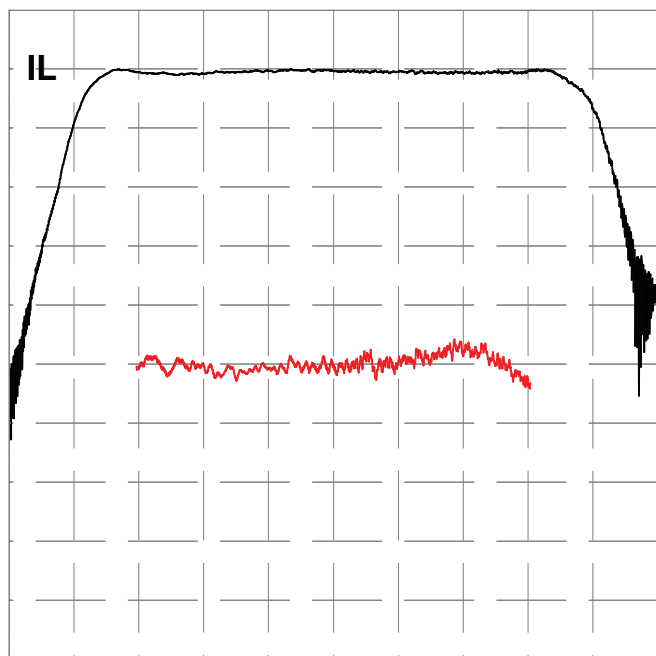
ID353.125-168.75-1.024U- 353.125 MHz Dispersive Delay Line 168.8 MHz Bandwidth

## Specifications

Parameter	Symbol	Min	Typical	Max	Unit	Notes
Center Frequency	$F_0$		353.125		MHz	1. Center Frequency ( $F_0$ ) and Bandwidth (B) are defined, not measured. Dispersion (T) is defined as $ B * S_0 $ .
Bandwidth	B		168.75		MHz	
Dispersion	T		1.024		$\mu$ sec	
Delay	$T_0$	2.14	2.142	2.16	$\mu$ sec	
Insertion Loss	IL		28.9	29.5	dB	2. Insertion Loss is the minimum loss for $ f - F_0  < .5B$
Slope	$S_0$	-0.00615	-0.0061	-0.006	$\mu$ s/MHz	3. Delay and Slope determined by best fit quadratic pulse in $ f - F_0  < .5B$ .
Pulse Width at -3dB			0.0046	0.0047	$\mu$ sec	
Sidelobes for $ t - T_0  < T$			-13	-12	dB	4. Specifications are at 22 °C only. Unit will operate undamaged from -54 °C to 125 °C with shifts $dF_0 = -x * F_0$ , $dT_0 = x * (T_0 + S_0 * F_0)$ , $dS_0 = x * 2 * S_0$ , where $x = 75E-6 * (\text{temperature} - 22 \text{ } ^\circ\text{C})$
Time Spurious for $ t - T_0  > T$			-64	-60	dB	
Substrate Material		128YX-LN				

## Typical Performance

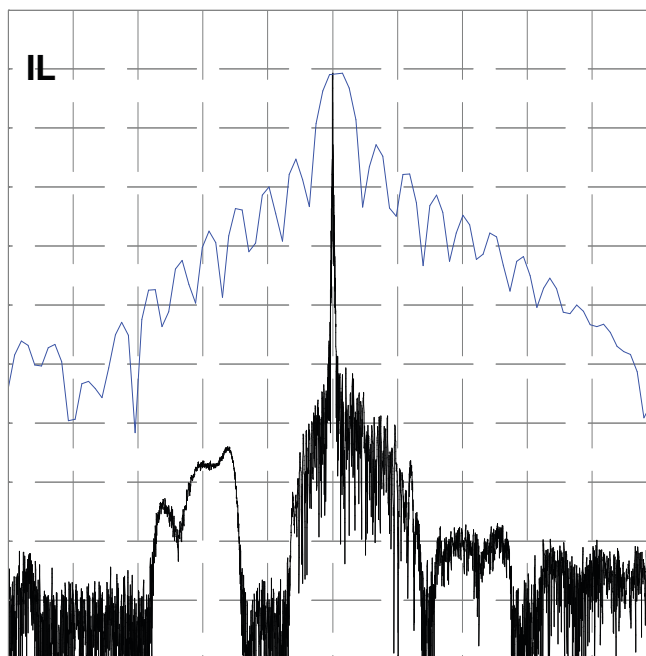
**Frequency Response**  
(Best Fit Quadratic Phase Removed)



10 dB/div, 10 deg/div, 25.000 MHz/div

**Compressed Pulse Response**

FFT(Frequency Response \* Cos(0.5 \* PI \* MIN(1, MAX(0, |f - F0| \* 4.2 / B - 2.1))))^2

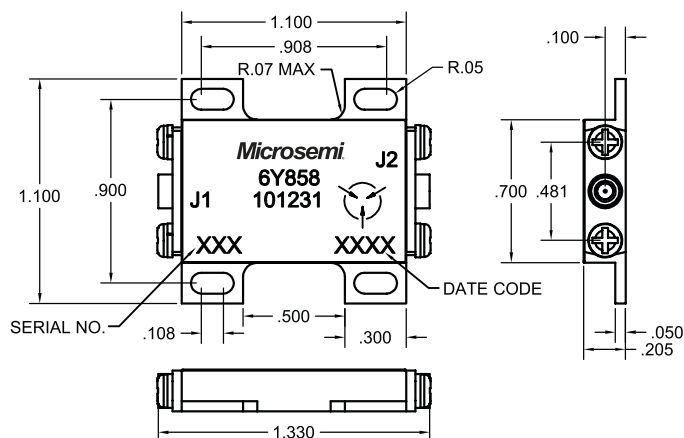


10 dB/div, 1.000 us/div, 0.012 us/div

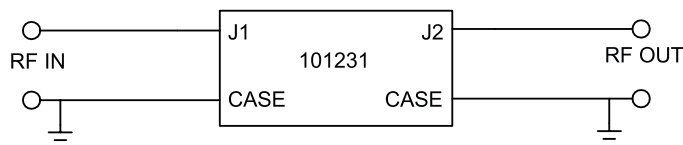
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## Package Outline



## Matching



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