

101305C

LR166.4-10-3.2 166.4 MHz Delay Line 10 MHz Bandwidth

Specifications

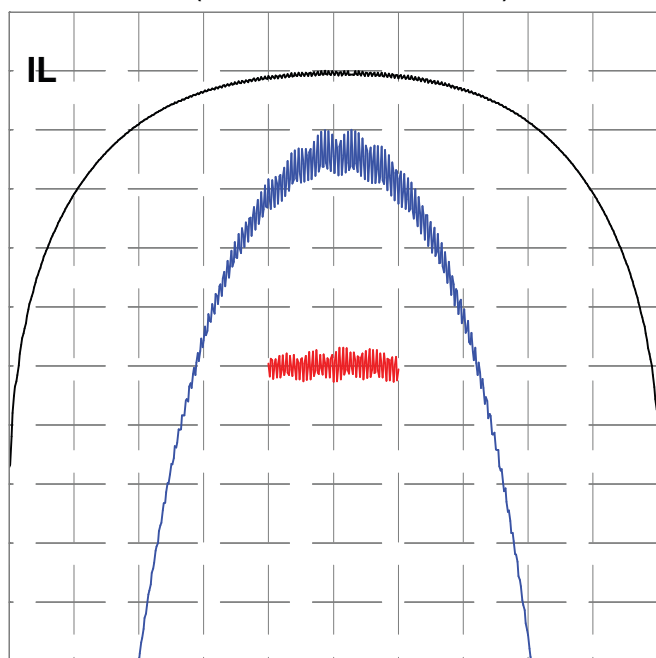
Parameter	Symbol	Min	Typical	Max	Unit
Center Frequency	F_0		166.4		MHz
Bandwidth	B		10		MHz
Delay	T_0	3.18	3.198	3.2	μsec
Insertion Loss	IL		14.5	15.5	dB
Amplitude Ripple			1.2	1.5	$\text{dB}_{\text{P-P}}$
Phase Ripple			5.8	8	$\text{deg}_{\text{P-P}}$
Spurious for $ t - T_0 > .9T_0$			-31	-30	dB
Substrate Material		X112Y-LT			

Notes

- Center Frequency (F_0) and Bandwidth (B) are defined, not measured.
- Insertion Loss is the minimum loss for $|f - F_0| < .5B$
- Ripple spec applies to the $|f - F_0| < .4B$, and is doubled for $.4B < |f - F_0| < .5B$
- 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 $x = 18E-6 * (\text{temperature} - 22^\circ\text{C})$

Typical Performance

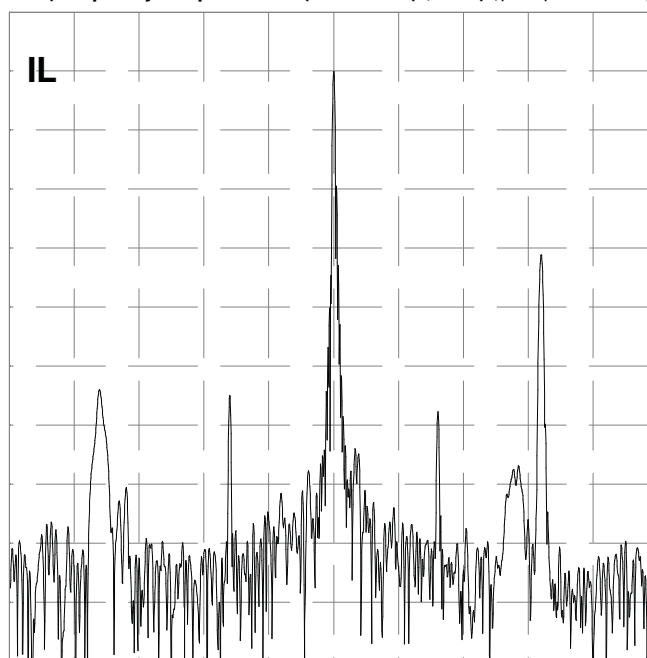
Frequency Response
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 2.700 MHz/div

Impulse Response

FFT(Frequency Response * Cos(0.5 * PI * MIN(1, MAX(0, |f - F0| * 2.0 / 16 - 1.0)))^2)

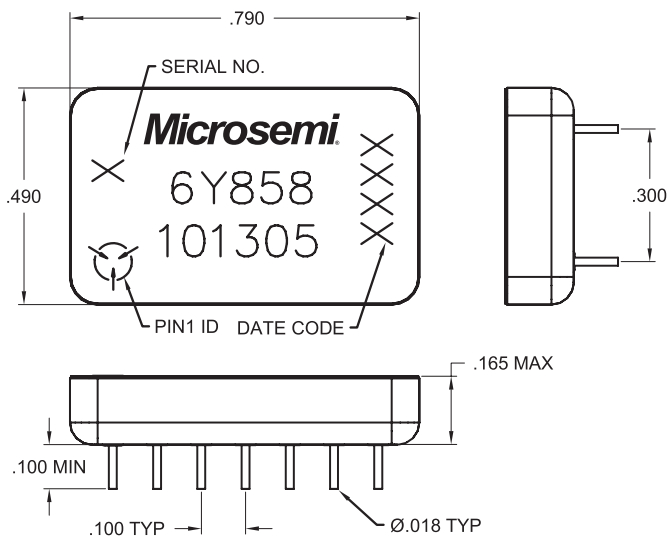


10 dB/div, 2.000 us/div

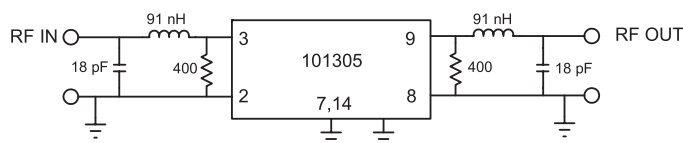
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Package Outline



Matching



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