

10118C

LR100-30-40.96 100 MHz Delay Line 30 MHz Bandwidth

Specifications

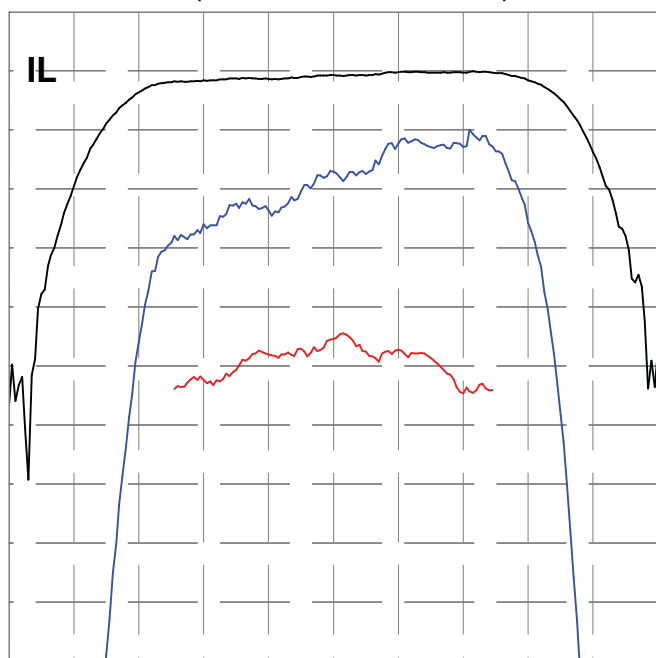
Parameter	Symbol	Min	Typical	Max	Unit
Center Frequency	F_0		100		MHz
Bandwidth	B		30		MHz
Delay	T_0	40.6	40.772	40.8	μsec
Insertion Loss	IL		31.2	36	dB
Amplitude Ripple			1.6	2.5	dB_{P-P}
Phase Ripple			10.5	25	deg_{P-P}
Spurious for $ t - T_0 > .9T_0$			-49	-33	dB
Substrate Material		YZ-LN			

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 $x = 94E-6 * (\text{temperature} - 22 \text{ °C})$

Typical Performance

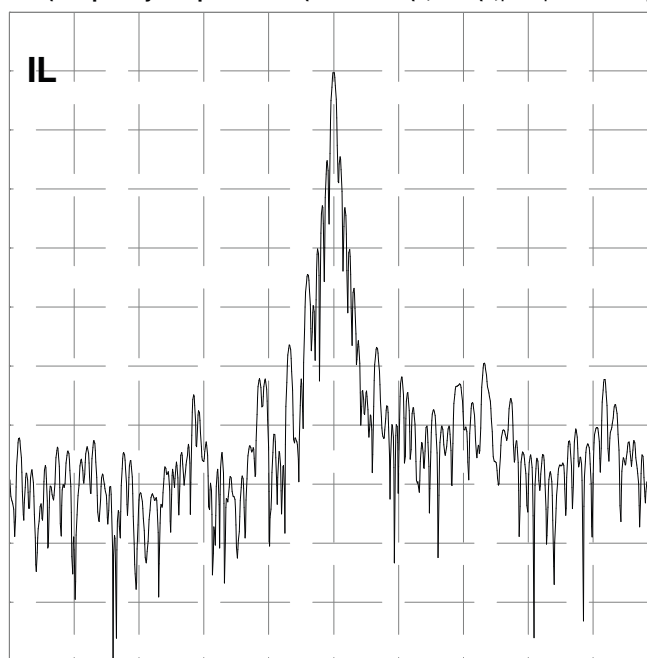
Frequency Response
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 5.500 MHz/div

Impulse Response

FFT(Frequency Response * Cos(0.5 * PI * MIN(1, MAX(0, |f - F0| * 2.0 / 35 - 1.0)))^2)

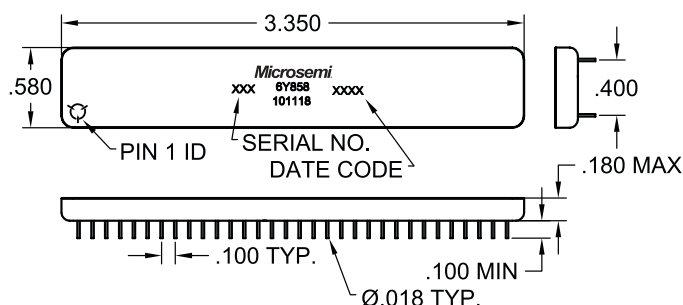


10 dB/div, 0.364 us/div

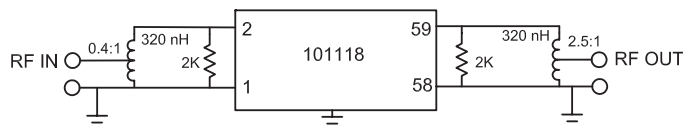
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Package Outline



Matching



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