

101411C

LR500-120-.75 500 MHz Delay Line 120 MHz Bandwidth

Specifications

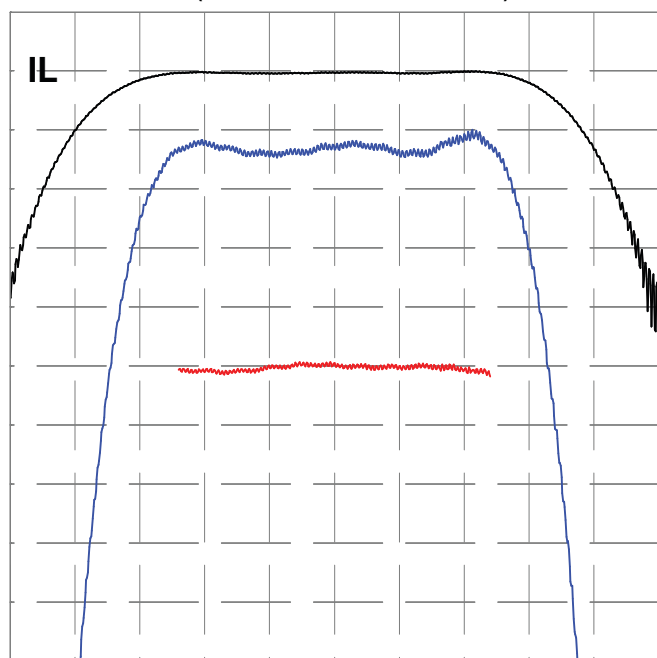
Parameter	Symbol	Min	Typical	Max	Unit
Center Frequency	F_0		500		MHz
Bandwidth	B		120		MHz
Delay	T_0	0.745	0.753	0.76	μsec
Insertion Loss	IL		32.2	34	dB
Amplitude Ripple			0.8	1.6	$\text{dB}_{\text{P-P}}$
Phase Ripple			3.8	8	$\text{deg}_{\text{P-P}}$
Spurious for $ t - T_0 > .9T_0$			-43	-35	dB
Substrate 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

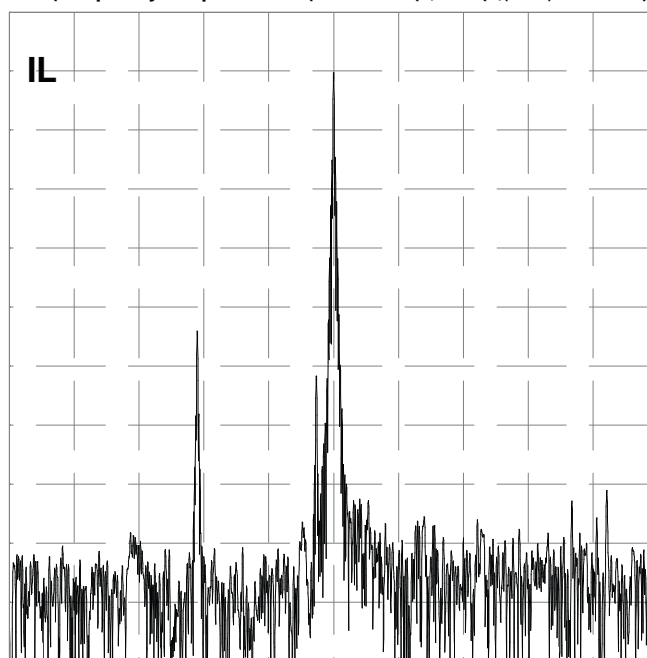
Frequency Response
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 22.400 MHz/div

Impulse Response

FFT(Frequency Response * Cos(0.5 * PI * MIN(1, MAX(0, |f - F0| * 2.3 / B - 1.2))))^2

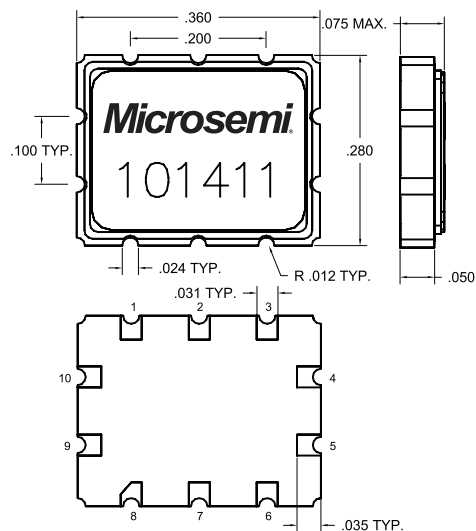


10 dB/div, 0.357 us/div

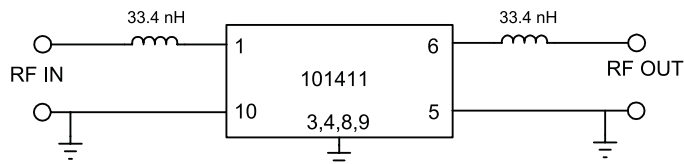
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Package Outline



Matching



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