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	dB_{P-P}
Phase Ripple			5.8	8	deg_{P-P}
Spurious for $|t - T_0| > .9T_0$			−31	−30	dB
Substrate Material		X112Y-LT			

Notes

1. Center Frequency (F_0) 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 $x = 18E\text{-}6 * (temperature - 22\,°C)$
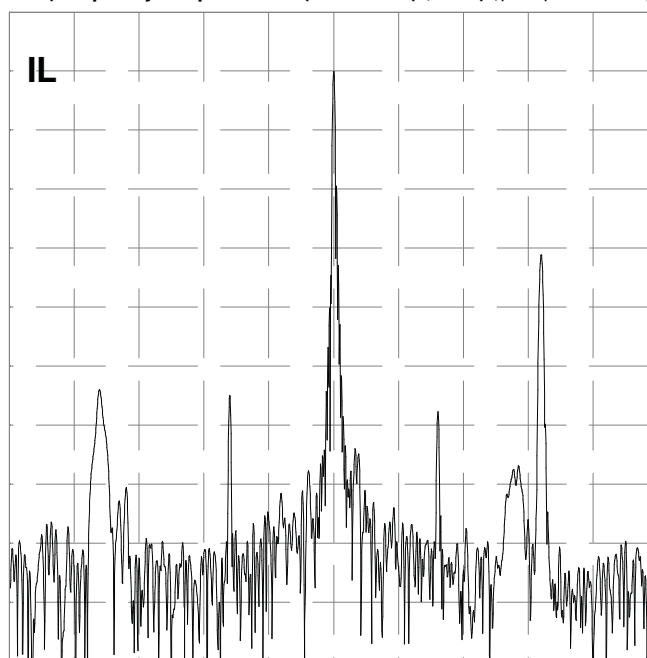
Typical Performance

Frequency Response
(Best Fit Linear Phase Removed)
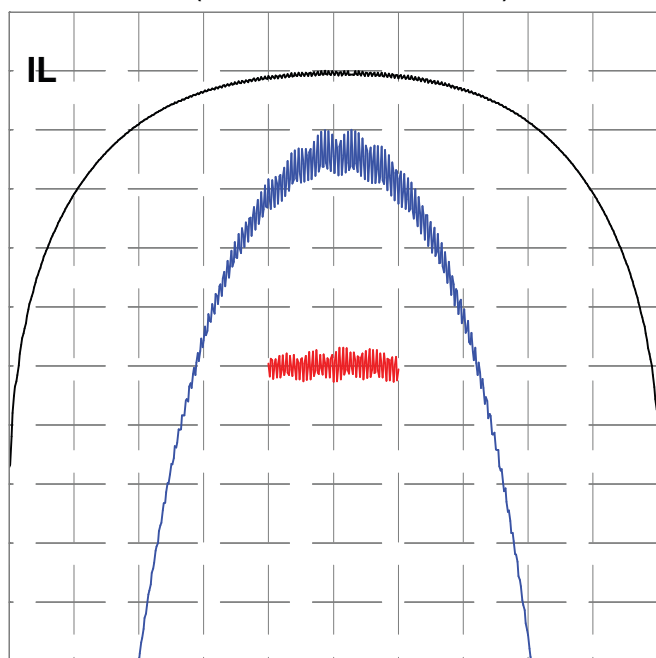
10 dB/div, 1 dB/div, 10 deg/div, 2.700 MHz/div

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

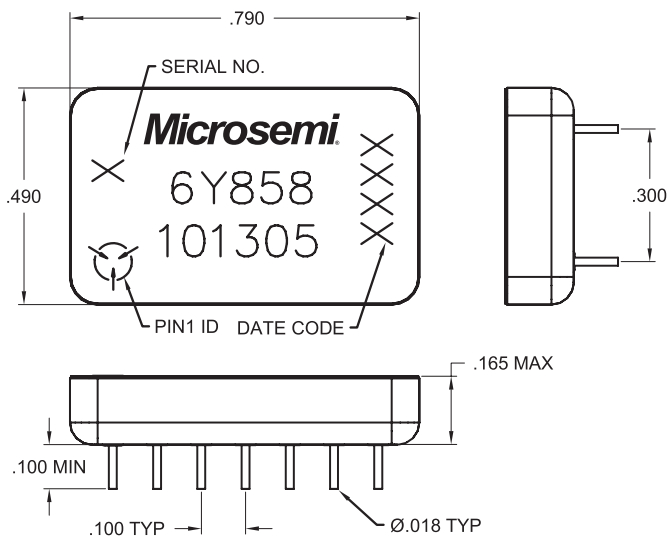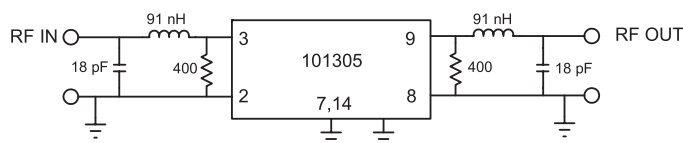**10 dB/div, 2.000 us/div**

Package Outline

Matching