

101165C

LR160-30-5.1 160 MHz Delay Line 30 MHz Bandwidth

Specifications

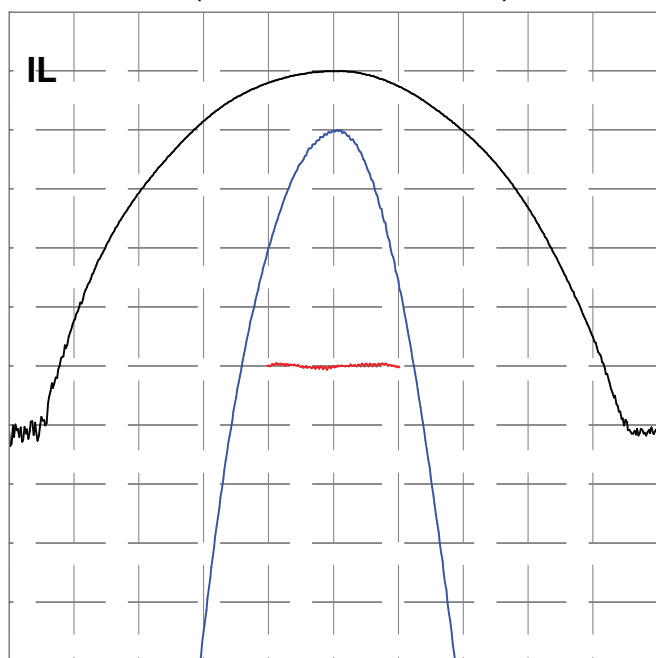
| Parameter | Symbol | Min | Typical | Max | Unit |
|----------------------------------|--------|----------|---------|------|---------------------------|
| Center Frequency | F_0 | | 160 | | MHz |
| Bandwidth | B | | 30 | | MHz |
| Delay | T_0 | 4.6 | 5.208 | 5.84 | μsec |
| Insertion Loss | IL | | 22.6 | 24 | dB |
| Amplitude Ripple | | | 2 | 2.5 | $\text{dB}_{\text{P-P}}$ |
| Phase Ripple | | | 1.2 | 3 | $\text{deg}_{\text{P-P}}$ |
| Spurious for $ t - T_0 > .9T_0$ | | | -57 | -52 | dB |
| Substrate Material | | 128YX-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 $x = 75E-6 * (\text{temperature} - 22 \text{ °C})$

Typical Performance

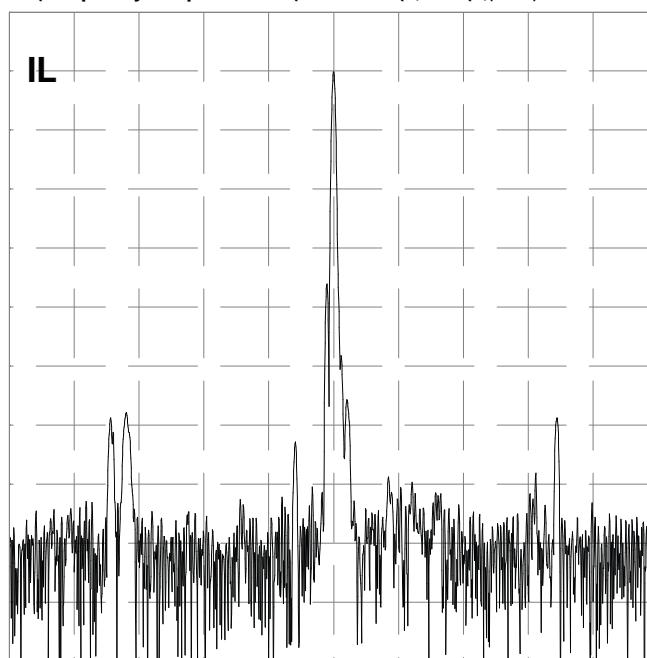
Frequency Response
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 13.150 MHz/div

Impulse Response

FFT(Frequency Response * Cos(0.5 * PI * MIN(1, MAX(0, |f - F0| * 17.2 / 118 - 8.6))))^2

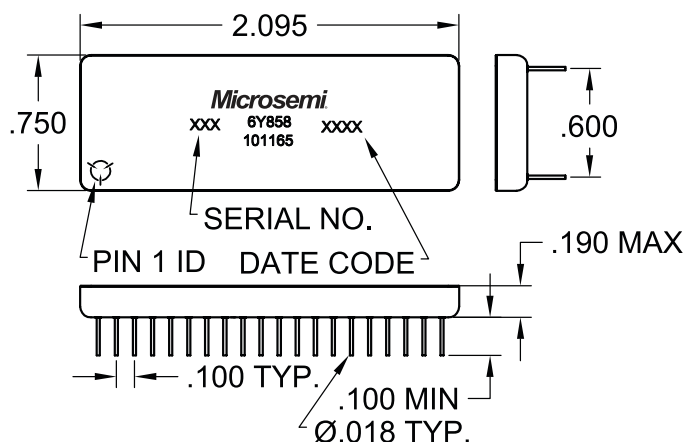


10 dB/div, 0.380 us/div

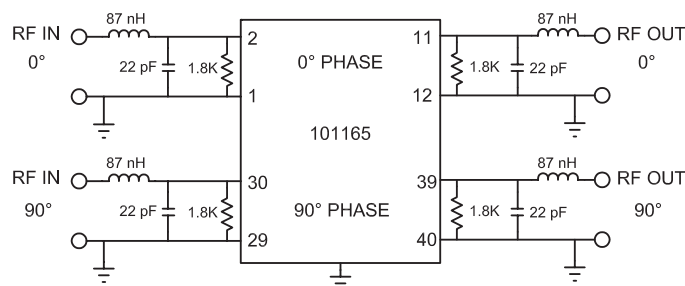
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Package Outline



Matching



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