

# 101525C

LR187.5-35-1.05 187.5 MHz Delay Line 35 MHz Bandwidth

## Specifications

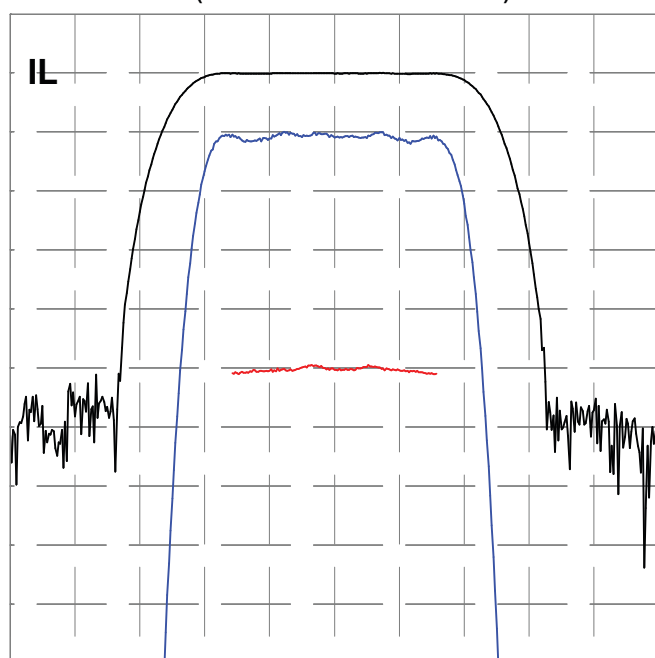
| Parameter                        | Symbol | Min  | Typical | Max  | Unit               |
|----------------------------------|--------|------|---------|------|--------------------|
| Center Frequency                 | $F_0$  |      | 187.5   |      | MHz                |
| Bandwidth                        | B      |      | 35      |      | MHz                |
| Delay                            | $T_0$  | 1.04 | 1.05    | 1.06 | $\mu\text{sec}$    |
| Insertion Loss                   | IL     |      | 29.3    | 30   | dB                 |
| Amplitude Ripple                 |        |      | 0.2     | 0.5  | dB <sub>P-P</sub>  |
| Phase Ripple                     |        |      | 1.5     | 2    | deg <sub>P-P</sub> |
| Spurious for $ t - T_0  > .9T_0$ |        |      | -61     | -60  | 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

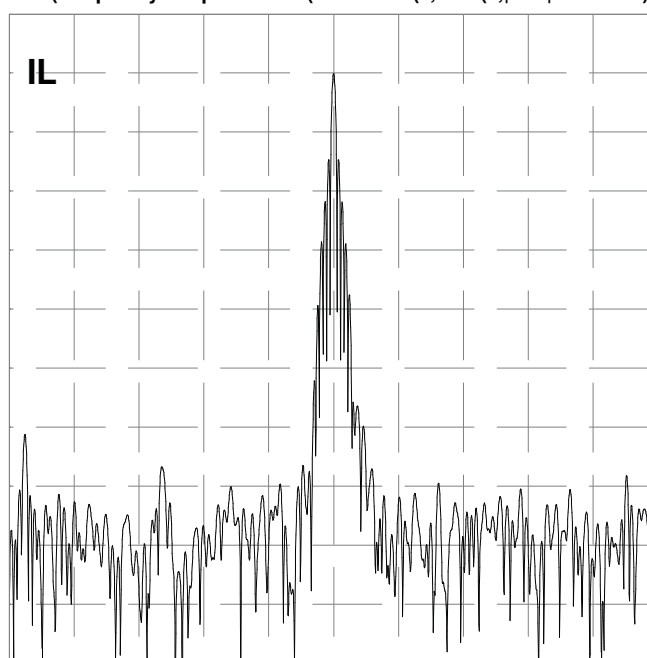
**Frequency Response**  
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 10.000 MHz/div

**Impulse Response**

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

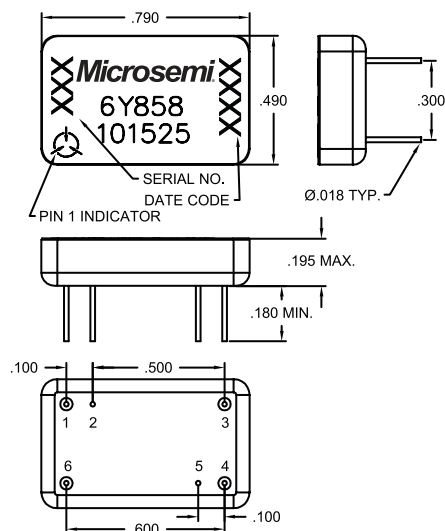


10 dB/div, 0.400 us/div

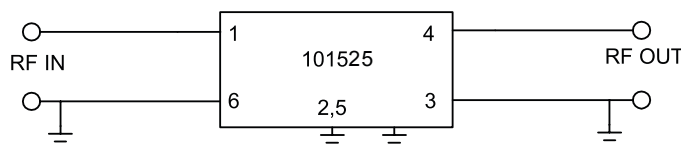
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## Package Outline



## Matching



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MSCC-0347-DS-01072-2.00-0717