

**Specifications**

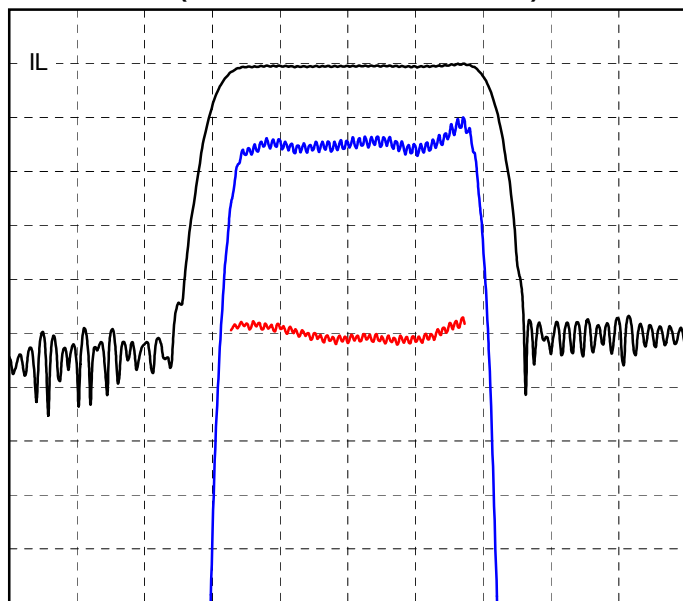
| Parameter                    | Unit     | Min  | Typical | Max  |
|------------------------------|----------|------|---------|------|
| Center Frequency (F0)        | MHz      |      | 300.2   |      |
| Bandwidth (B)                | MHz      |      | 16      |      |
| -3 dB Bandwidth (B3)         | MHz      | 15.2 | 15.4    |      |
| -40 dB Bandwidth (B40)       | MHz      |      | 19.8    | 20   |
| Delay (T0)                   | μsec     | 1.37 | 1.382   | 1.39 |
| Insertion Loss (IL)          | dB       |      | 21.2    | 22   |
| Amplitude Ripple             | dB p-p   |      | 0.7     | 1.2  |
| Phase Ripple                 | deg p-p  |      | 4.5     | 6    |
| Rejection                    | dB       | 46   | 50      |      |
| Spurious for $ t-T0  > .9T0$ | dB       |      | -40     | -39  |
| Substrate Material           | X112Y-LT |      |         |      |

**Notes:**

- Center Frequency (F0) and Bandwidth (B) are defined, not measured.
- Insertion Loss is the minimum loss for  $|f-F0| < .5B$
- Ripple spec applies to the  $|f-F0| < .4B$ , and is doubled for  $.4B < |f-F0| < .5B$
- Rejection spec applies to  $(B40 \text{ Spec} - B/2) < |f-F0| < F0/2$
- Specifications are at 22C only. Unit will operate undamaged from -54C to 125C with shifts  $dF0 = -x \cdot F0$ ,  $dT0 = x \cdot T0$ , where  $x = 18E-6 \cdot (\text{temperature} - 22C)$

**Typical Performance**

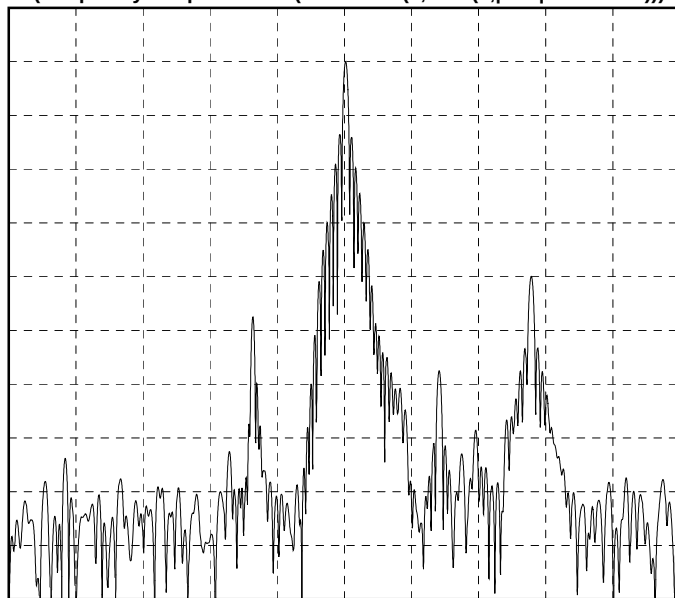
**Frequency Response**  
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 4 MHz/div

**Impulse Response**

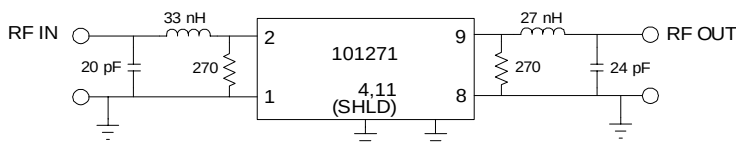
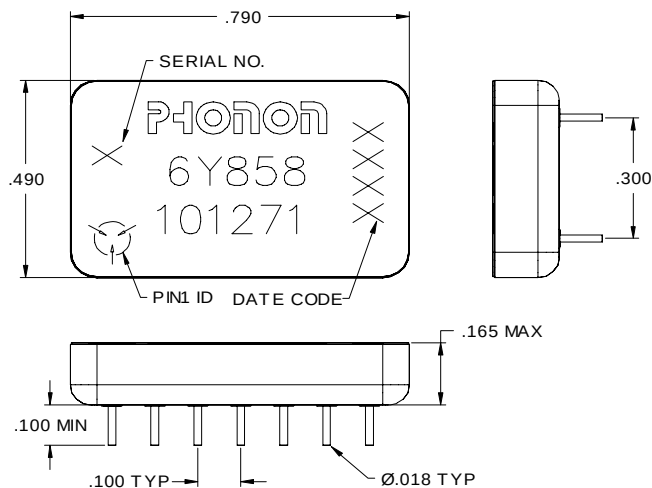
FFT(Frequency Response \* Cos(0.5 \* Pi \* MIN(1, MAX(0, |f-F0| \* 2.0 / 16 - 1.0)))^2)



10 dB/div, 1 us/div

**Package Outline**

**Matching**



Matched S-parameters available at [www.phonon.com](http://www.phonon.com)