

**Specifications**

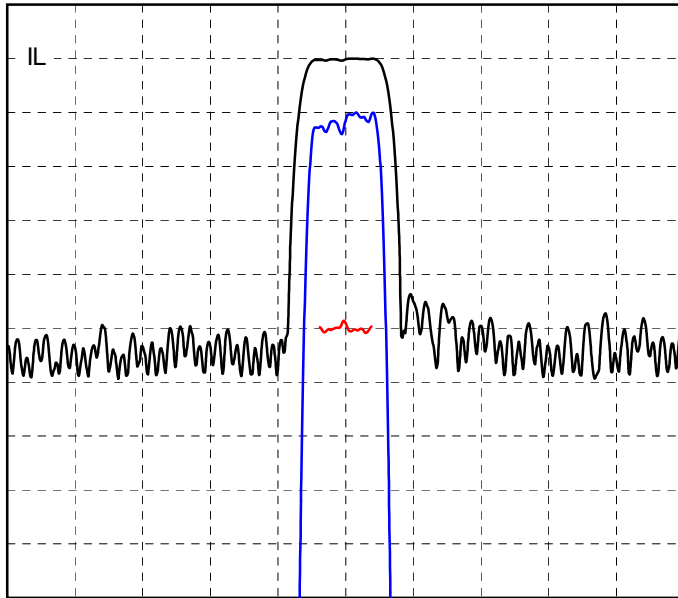
Parameter	Unit	Min	Typical	Max
Center Frequency (F0)	MHz		99.75	
Bandwidth (B)	MHz		0.425	
-3 dB Bandwidth (B3)	MHz	0.5	0.6	
-40 db Bandwidth (B40)	MHz		0.8	0.9
Delay (T0)	μsec	7.88	7.908	7.96
Insertion Loss (IL)	dB		21	25.5
Amplitude Ripple	dB p-p		0.4	1
Phase Ripple	deg p-p		2.4	4
Rejection	dB	44	46	
Spurious for  t-T0 >.9T0	dB		-43	-40
Substrate Material		38YX Q		

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  $x = 3E-8 \cdot (\text{temperature} - 22C)^2$

**Typical Performance**

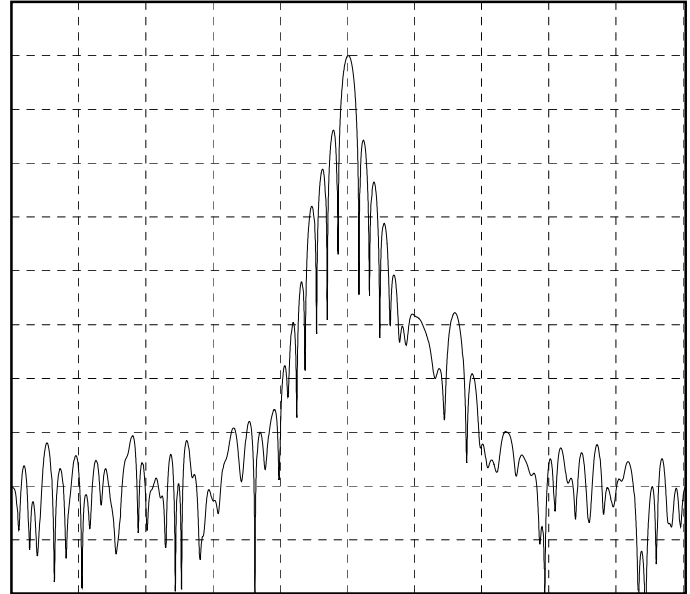
**Frequency Response**  
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 0.5 MHz/div

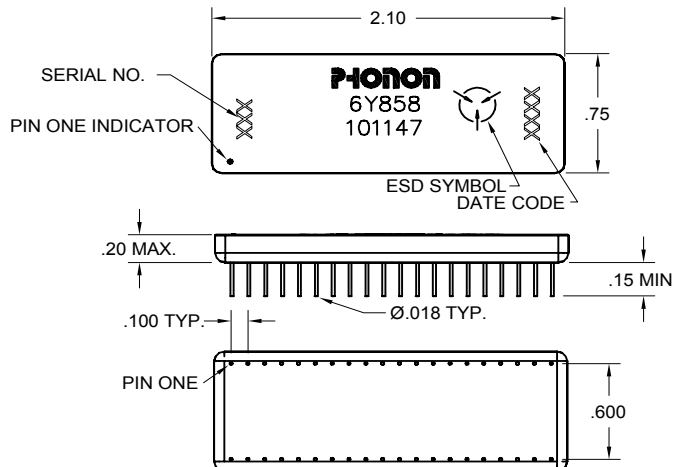
**Impulse Response**

FFT(Frequency Response \* Cos(0.5 \* PI \* MIN(1, MAX(0, |f-F0| \* 2.0 / 0.6 - 1.0)))^2)

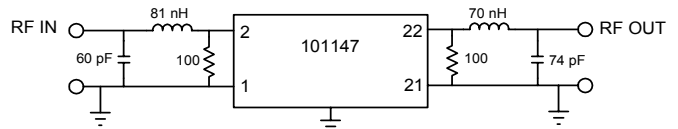


10 dB/div, 10 us/div

**Package Outline**



**Matching**



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