

**Specifications**

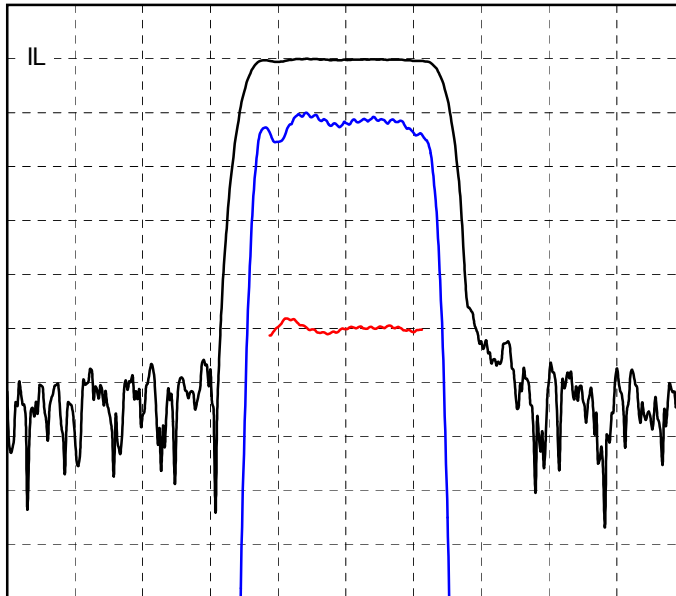
Parameter	Unit	Min	Typical	Max
Center Frequency (F0)	MHz		250	
Bandwidth (B)	MHz		3	
-3 dB Bandwidth (B3)	MHz	3.3	3.4	
-40 db Bandwidth (B40)	MHz		4.3	4.4
Delay (T0)	μsec	2.96	2.97	2.98
Insertion Loss (IL)	dB		26.4	31
Amplitude Ripple	dB p-p		0.5	1
Phase Ripple	deg p-p		2.7	5
Rejection	dB	54	56	
Spurious for  t-T0 >.9T0	dB		-52	-50
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  $x = 3E-8 \cdot (\text{temperature} - 22C)^{\wedge}2$

**Typical Performance**

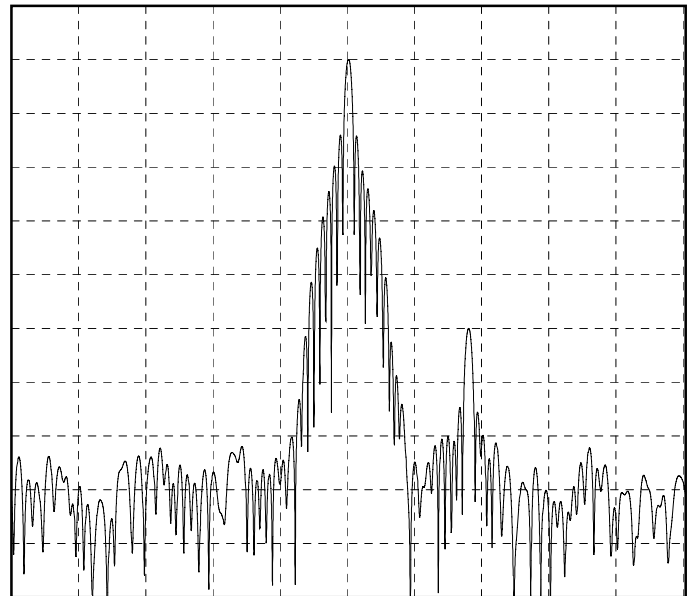
**Frequency Response**  
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 1.2 MHz/div

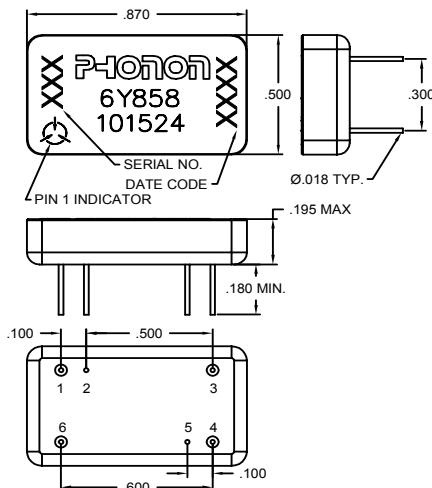
**Impulse Response**

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

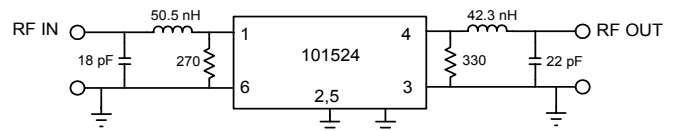


10 dB/div, 3.333 us/div

**Package Outline**



**Matching**



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