

Specifications

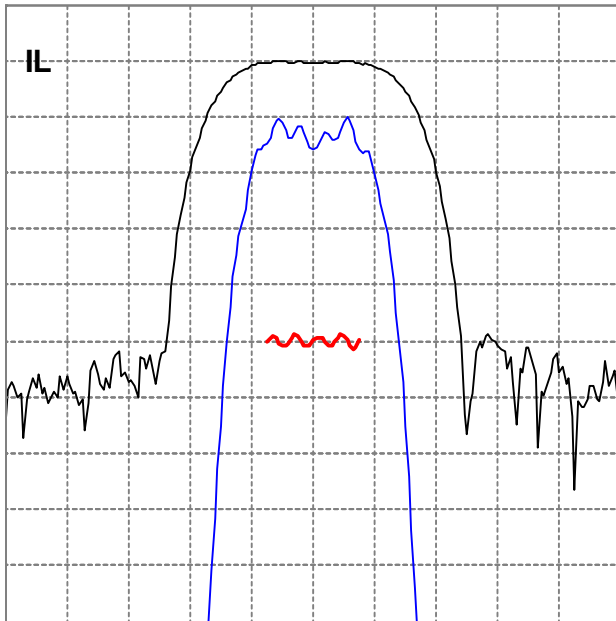
Parameter	Unit	Min	Typical	Max
Center Frequency (F0)	MHz		21.4	
Bandwidth (B)	MHz		0.5	
-3 dB Bandwidth (B3)	MHz	0.7	0.8	
-40 db Bandwidth (B40)	MHz		1.4	1.5
Delay (T0)	μsec	4.48	4.527	4.56
Insertion Loss (IL)	dB		16.8	18.5
Amplitude Ripple	dB p-p		0.6	1
Phase Ripple	deg p-p		2.7	4
Rejection	dB	48	52	
Spurious for t-T0 >.9T0	dB		-37	-35
Substrate Material		36YX-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

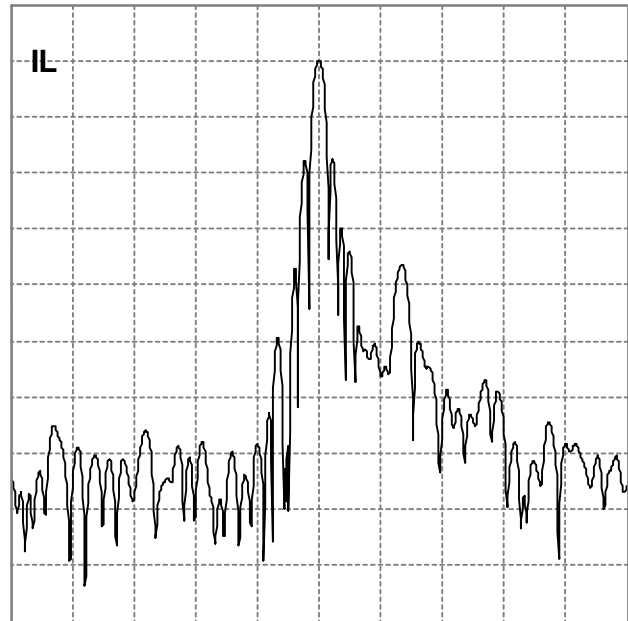
Frequency Response
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 0.300 MHz/div

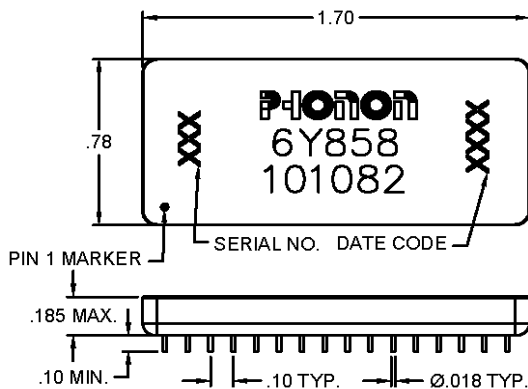
Impulse Response

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

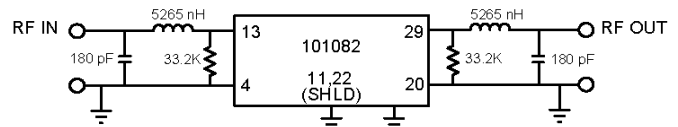


10 dB/div, 6.667 us/div

Package Outline



Matching



Matched S-parameters available at www.phonon.com