

101275C

FB317.7-3 317.7 MHz Bandpass Filter 3 MHz Bandwidth

Specifications

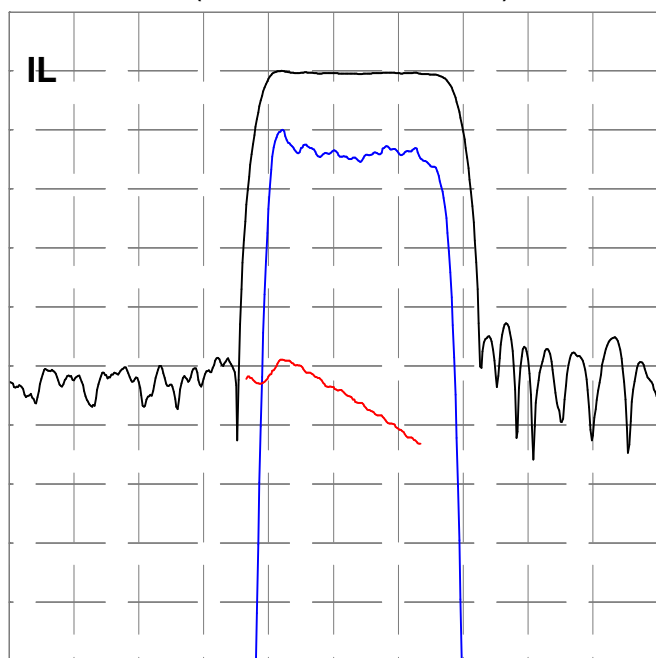
Parameter	Symbol	Min	Typical	Max	Unit
Center Frequency	F_0		317.7		MHz
Bandwidth	B		3		MHz
-3dB Bandwidth	B_3	2.8	2.9		MHz
-40dB Bandwidth	B_{40}		3.7	3.8	MHz
Delay	T_0	3.12	3.16	3.22	μsec
Insertion Loss	IL		22	25.5	dB
Amplitude Ripple			8.3	20	dB_{P-P}
Phase Ripple			13.6	35	deg_{P-P}
Rejection		42	45		dB
Spurious for $ t - T_0 > .9T_0$			-50	-44	dB
Substrate Material		36YX-Q			

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 $.4B < |f - F_0| < .5B$
- Rejection spec applies to $(B_{40} \text{ Spec} - B/2) < |f - F_0| < F_0/2$
- 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 $x = 3E-8 * (\text{temperature} - 22^\circ\text{C})$

Typical Performance

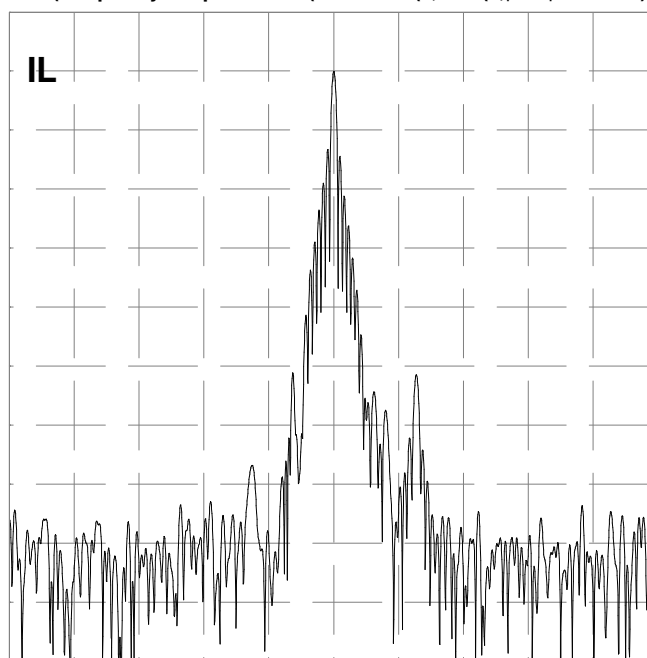
Frequency Response
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 1.000 MHz/div

Impulse Response

FFT(Frequency Response * Cos(0.5 * PI * MIN(1, MAX(0, |f - F0| * 2.0 / 3 - 1.0)))^2)

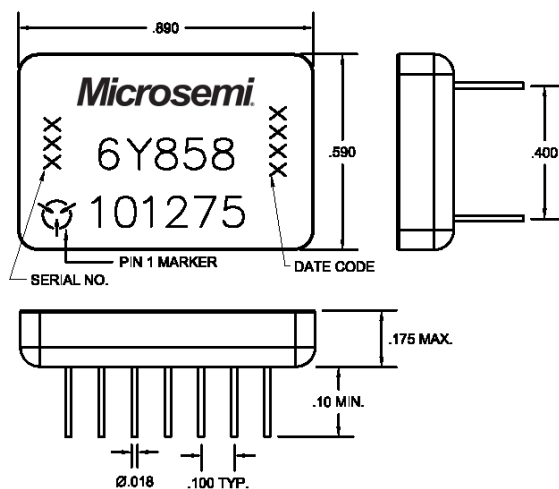


10 dB/div, 5.000 us/div

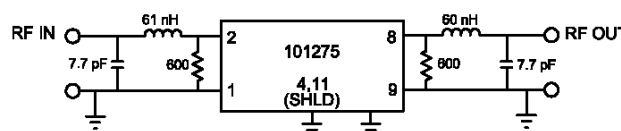
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Package Outline



Matching



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