

101194C

FB304-50 304 MHz Bandpass Filter 50 MHz Bandwidth

Specifications

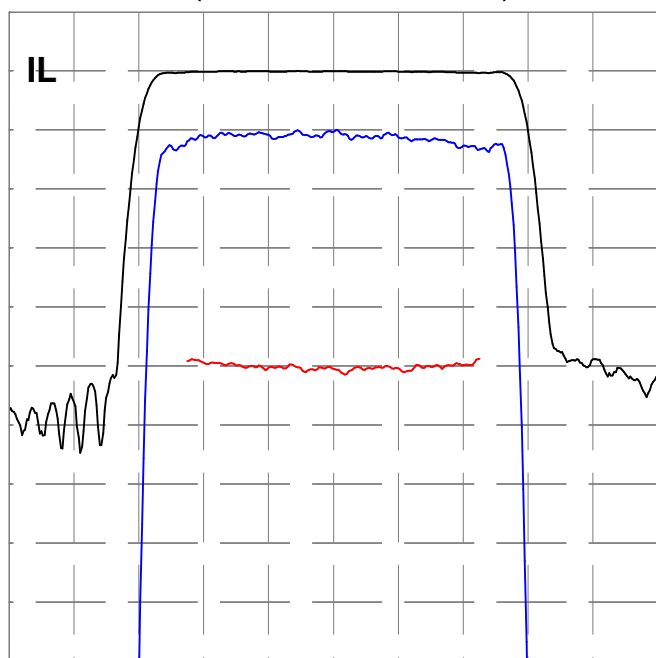
Parameter	Symbol	Min	Typical	Max	Unit
Center Frequency	F_0		304		MHz
Bandwidth	B		50		MHz
-3dB Bandwidth	B_3	56.6	56.9		MHz
-40dB Bandwidth	B_{40}		65.7	66.2	MHz
Delay	T_0	3.66	3.673	3.7	μsec
Insertion Loss	IL		26.3	28	dB
Amplitude Ripple			0.3	0.5	dB_{P-P}
Phase Ripple			1.8	3	deg_{P-P}
Rejection		46	49		dB
Spurious for $ t - T_0 > .9T_0$			-54	-52	dB
Substrate Material		128YX-LN			

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 $x = 75E-6 * (\text{temperature} - 22\text{ °C})$

Typical Performance

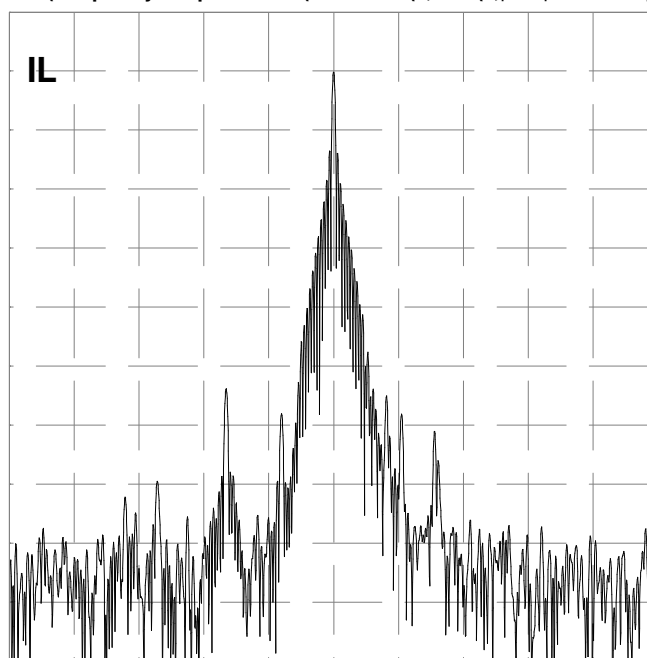
Frequency Response
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 10.000 MHz/div

Impulse Response

FFT(Frequency Response * Cos(0.5*PI*MIN(1,MAX(0,|f-F0|*2.0/50-1.0)))^2)

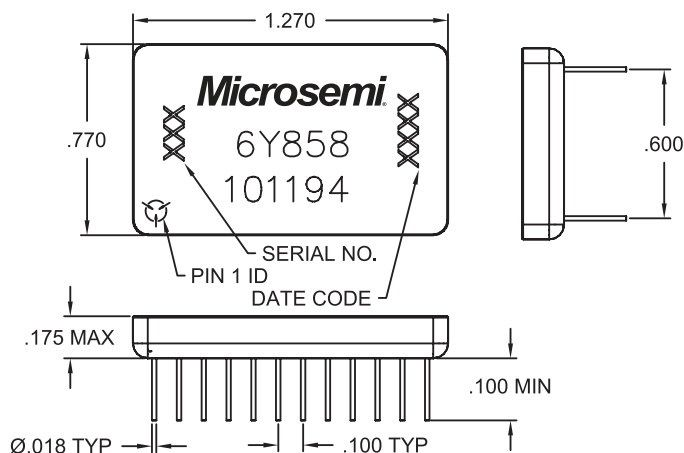


10 dB/div, 0.400 us/div

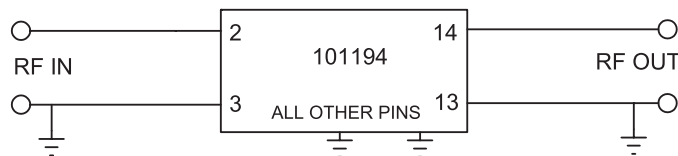
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Package Outline



Matching



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