101385C

FB68.0625-1.625 68.0625 MHz Bandpass Filter 1.625 MHz Bandwidth

Specifications

Parameter	Symbol	Min	Typical	Max	Unit
Center Frequency	F_0		68.0625		MHz
Bandwidth	B		1.625		MHz
–3 dB Bandwidth	B_3	1.9	1.9		MHz
–40 dB Bandwidth	B_{40}		2.3	2.3	MHz
Delay	T_0	7.04	7.062	7.08	µsec
Insertion Loss	IL		23.7	33.5	dB
Amplitude Ripple			0.4	1	dB_{P-P}
Phase Ripple			2.1	4	deg_{P-P}
Rejection		50	54		dB
Spurious for $\|t - T_0\| > .9T_0$			–46	–44	dB
Substrate Material	40YX-Q				

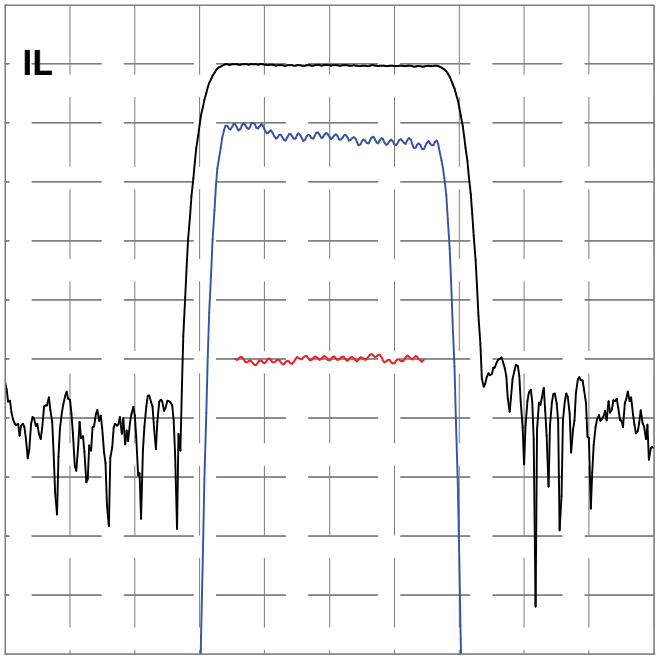
Notes

1. Center Frequency (F_0) and Bandwidth (B) are defined, not measured.
2. Insertion Loss is the minimum loss for $|f - F_0| < .5B$
3. Ripple spec applies to the $|f - F_0| < .4B$, and is doubled for $.4B < |f - F_0| < .5B$
4. Rejection spec applies to $(B_{40}\ \text{Spec} - B/2) < |f - F_0| < F_0/2$
5. 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 $x = 3E\text{-}8 * (\text{temperature} - 22\,°C)^2$

Typical Performance

Frequency Response

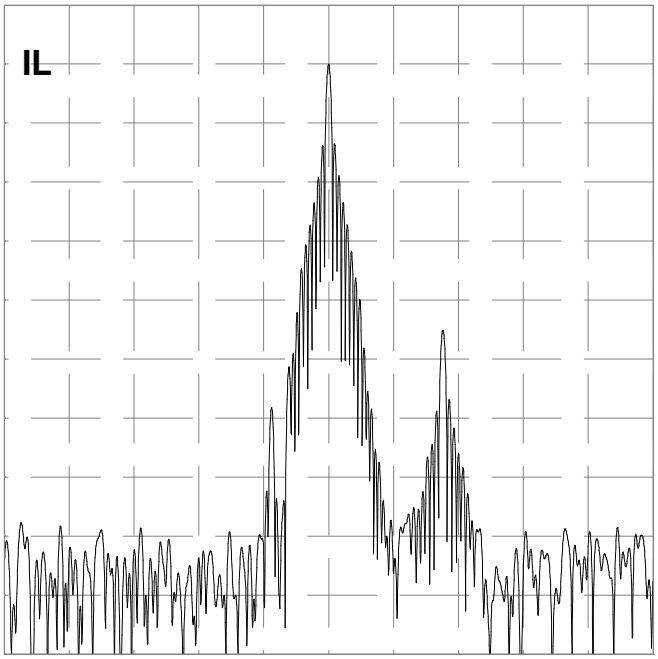
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 0.500 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, 8.000 us/div

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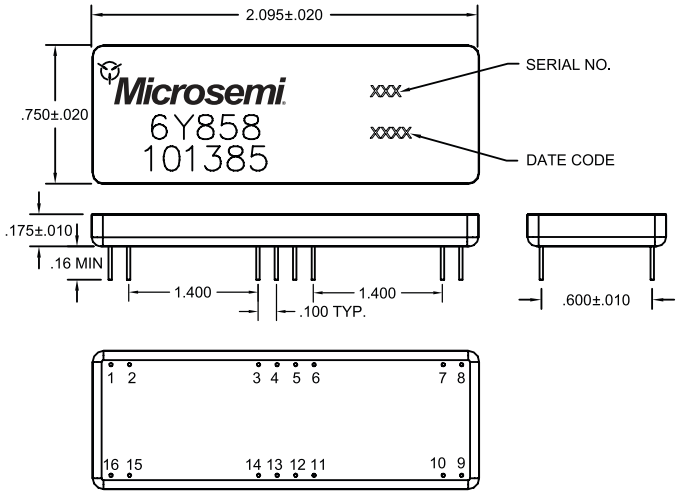
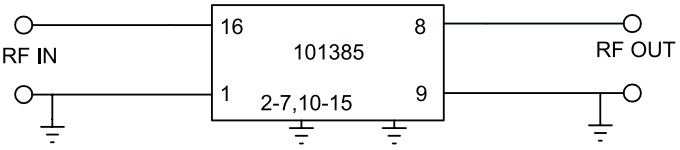
Package Outline



Matching



Microsemi Corporate Headquarters
One Enterprise, Aliso Viejo, CA 92656 USA
Within the USA: +1 (800) 713-4113
Outside the USA: +1 (949) 380-6100
Fax: +1 (949) 215-4996
Email: sales.support@microsemi.com
www.microsemi.com

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