101249C

FB367.5-2.5 367.5 MHz Bandpass Filter 2.5 MHz Bandwidth

Specifications

Parameter	Symbol	Min	Typical	Max	Unit
Center Frequency	F_0		367.5		MHz
Bandwidth	B		2.5		MHz
–3 dB Bandwidth	B_3	2.5	2.6		MHz
–40 dB Bandwidth	B_{40}		4.13	4.39	MHz
Delay	T_0	2.107	2.123	2.138	µsec
Insertion Loss	IL		18.5	21.1	dB
Amplitude Ripple			0.8	1.7	dB_{P-P}
Phase Ripple			5.1	8.9	deg_{P-P}
Rejection		48	50		dB
Spurious for $\|t - T_0\| > .9T_0$			–38	–34	dB
Substrate Material	36YX-Q				

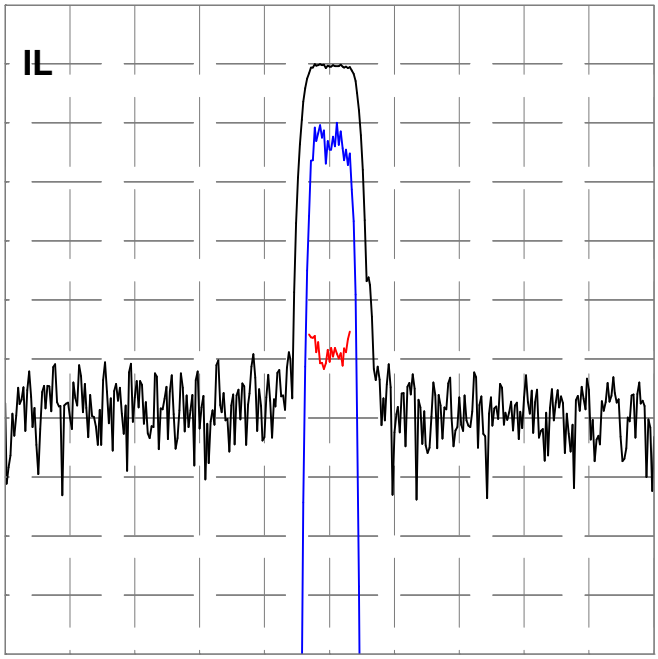
Notes

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 $x = 3E\text{-}8 * (\text{temperature} - 22\,°C)$

Typical Performance

Frequency Response

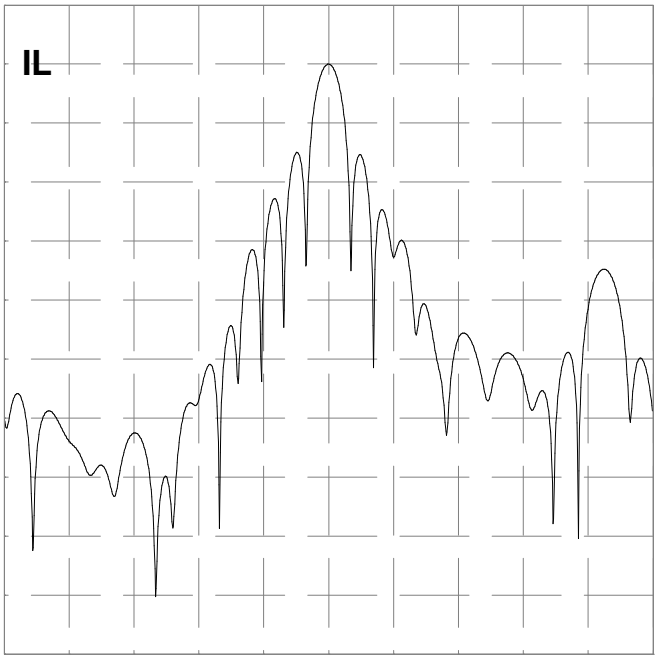
(Best Fit Linear Phase Removed)



10 dB/div, 1 dB/div, 10 deg/div, 3.500 MHz/div

Impulse Response

FFT(Frequency Response*Cos(0.5*PI*MIN(1,MAX(0,|f-F0|*2.0/2.5-1.0)))^2)

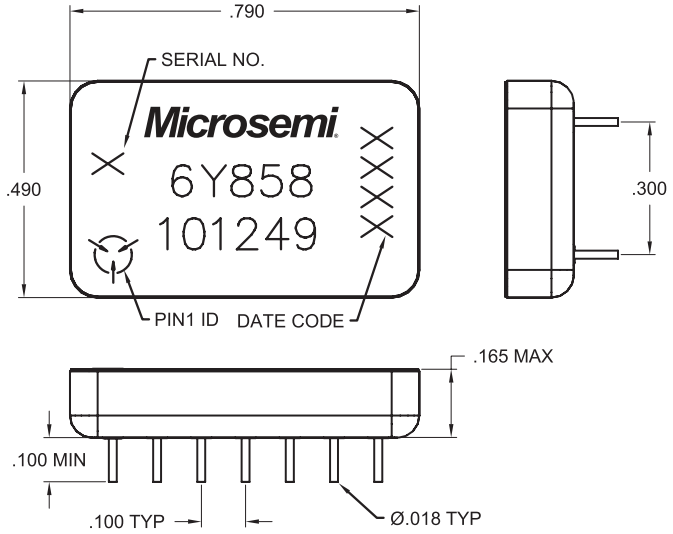


10 dB/div, 1.000 us/div

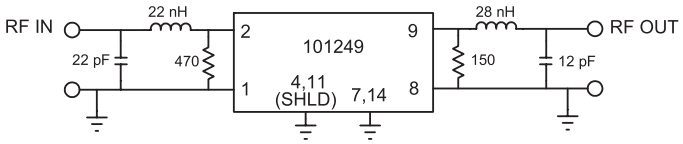
101249C

FB367.5-2.5 367.5 MHz Bandpass Filter 2.5 MHz Bandwidth

Package Outline



Matching



Microsemi
Power Matters.™

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

Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for aerospace & defense, communications, data center and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; enterprise storage and communication solutions, security technologies and scalable anti-tamper products; Ethernet solutions; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, California and has approximately 4,800 employees globally. Learn more at www.microsemi.com.

MSCC-0347-DS-01133-2.00-0717