

101212C

FB500-.006 500 MHz Resonator 0.006 MHz Bandwidth

Specifications

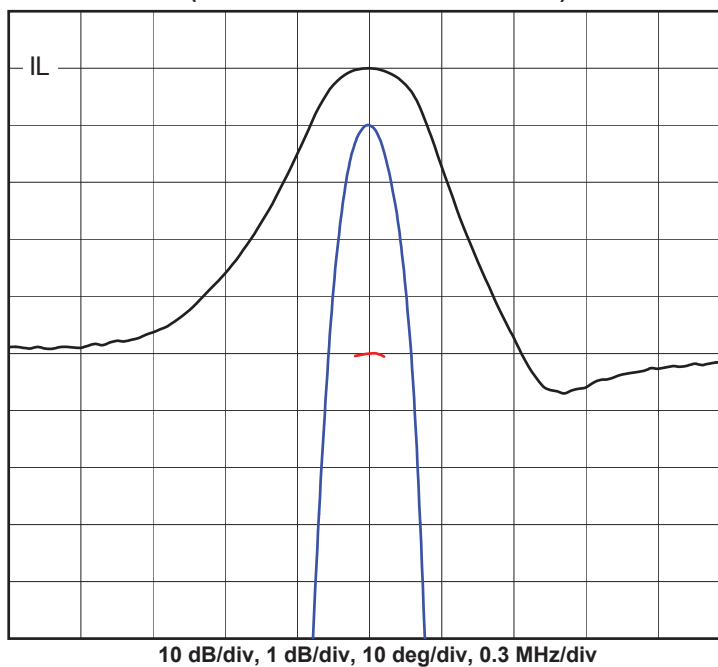
Parameter	Symbol	Min	Typical	Max	Unit
Center Frequency	F_0		500		MHz
Bandwidth	B		0.006		MHz
-3dB Bandwidth	B_3	0.2	0.3		MHz
Stopband Bandwidth			1.2	1.3	MHz
Delay	T_0	2.04	2.282	2.52	μsec
Insertion Loss	IL		5	6.8	dB
Amplitude Ripple			0.1	0.5	dB _{P-P}
Phase Ripple			0.1	0.5	deg _{P-P}
Rejection		42	47		dB
Substrate Material		30YX-Q			

Notes

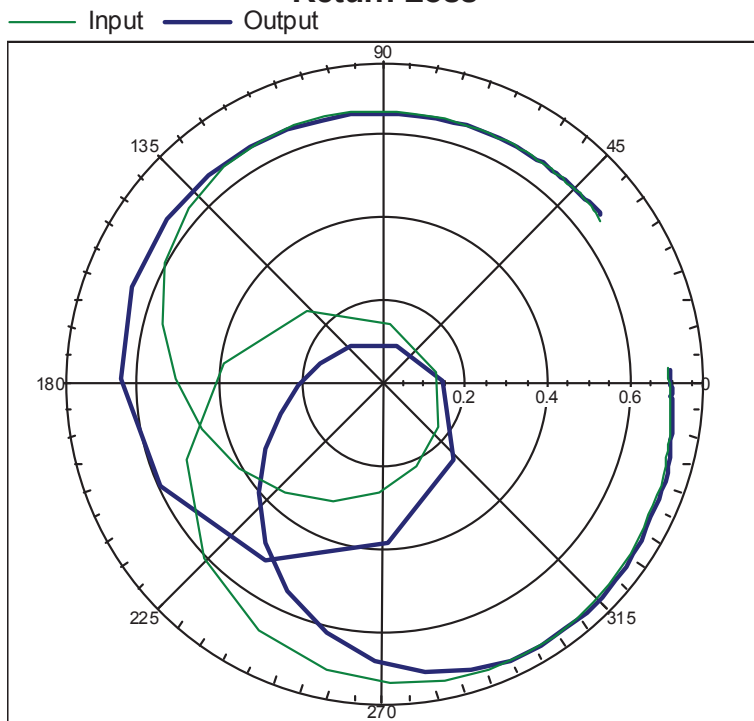
- Center Frequency (F_0) and Bandwidth (B) are defined, not measured.
- Insertion Loss is the minimum loss for $|f - F_0| < .5B$
- Ripple spec applies to the $|f - F_0| < .4B$, and is doubled for $.4B < |f - F_0| < .5B$
- Rejection spec applies to $(B_{40} \text{ Spec} - B/2) < |f - F_0| < F_0/2$
- Specifications 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 $x = 3E-6 * (\text{temperature} - 22 \text{ °C})^2$

Typical Performance

Frequency Response
(Best Fit Linear Phase Removed)



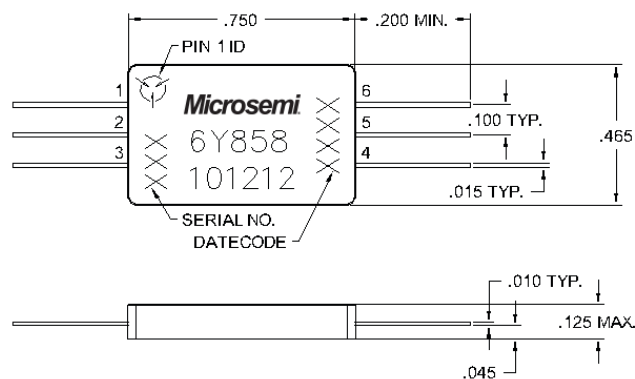
Return Loss



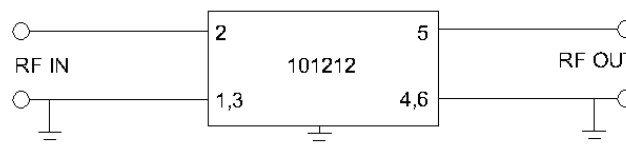
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Package Outline



Matching



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