

100693C

RD60-6-50U+ 60 MHz Dispersive Delay Line 6 MHz Bandwidth

Specifications

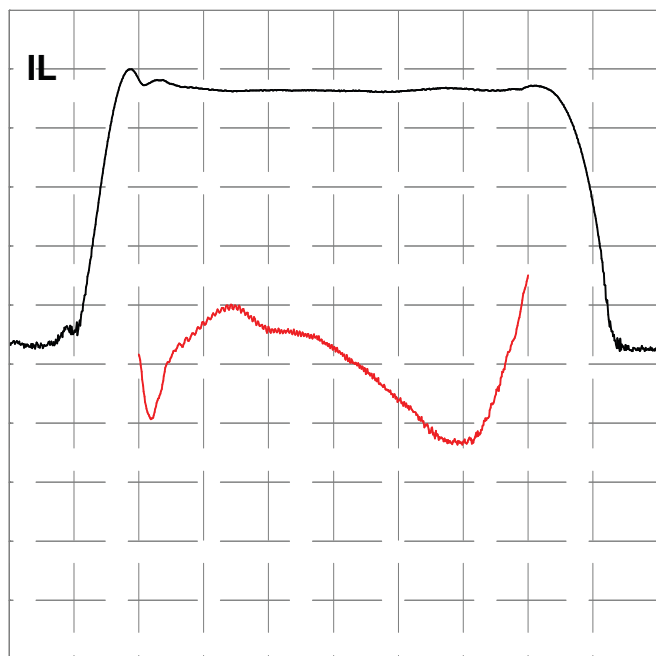
Parameter	Symbol	Min	Typical	Max	Unit
Center Frequency	F_0		60		MHz
Bandwidth	B		6		MHz
Dispersion	T		50		μsec
Delay	T_0	28.4	28.776	29.1	μsec
Insertion Loss	IL		46.7	48	dB
Slope	S_0	8.28	8.36	8.37	$\mu\text{s}/\text{MHz}$
Pulse Width at -3dB			0.14	0.142	μsec
Sidelobes for $ t - T_0 < T$			-11.9	-11	dB
Time Spurious for $ t - T_0 > T$			-62	-60	dB
Substrate Material		STQ			

Notes

- Center Frequency (F_0) and Bandwidth (B) are defined, not measured. Dispersion (T) is defined as $|B * S_0|$.
- Insertion Loss is the minimum loss for $|f - F_0| < .5B$
- Delay and Slope determined by best fit quadratic pulse in $|f - F_0| < .5B$.
- Specifications are at 22 °C only. Unit will operate undamaged from -54 °C to 125 °C with shifts $dF_0 = -x * F_0$, $dT_0 = x * (T_0 + S_0 * F_0)$, $dS_0 = x * 2 * S_0$, where $x = 3E-8 * (\text{temperature} - 22 \text{ }^\circ\text{C})^2$

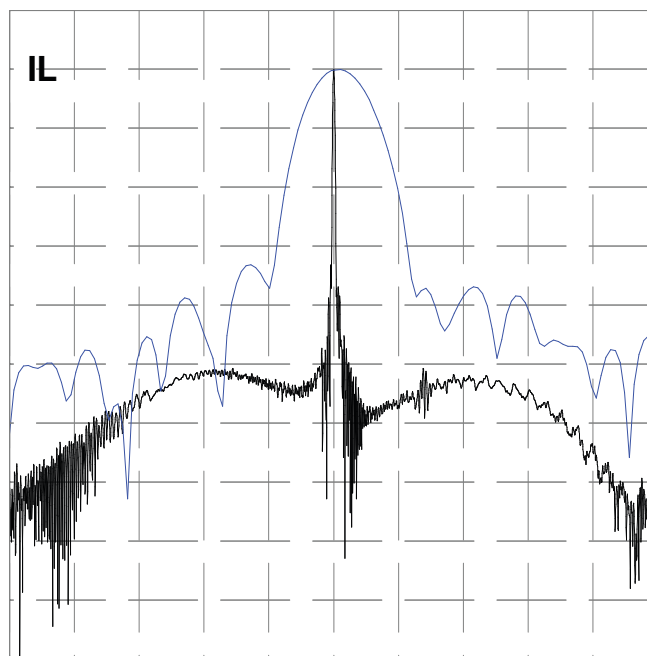
Typical Performance

Frequency Response
(Best Fit Quadratic Phase Removed)



10 dB/div, 10 deg/div, 0.900 MHz/div

Compressed Pulse Response
Time Gated, Limited Expander 100693C with 100694C

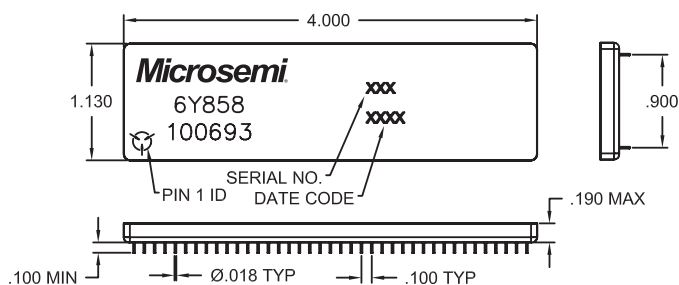


10 dB/div, 10.000 $\mu\text{s}/\text{div}$, 0.333 $\mu\text{s}/\text{div}$

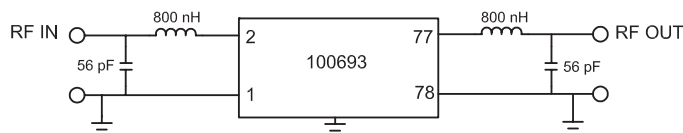
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Package Outline



Matching



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