

101529C

LR1000-500-1.5 Multiple Channel Delay Line Module

Specifications

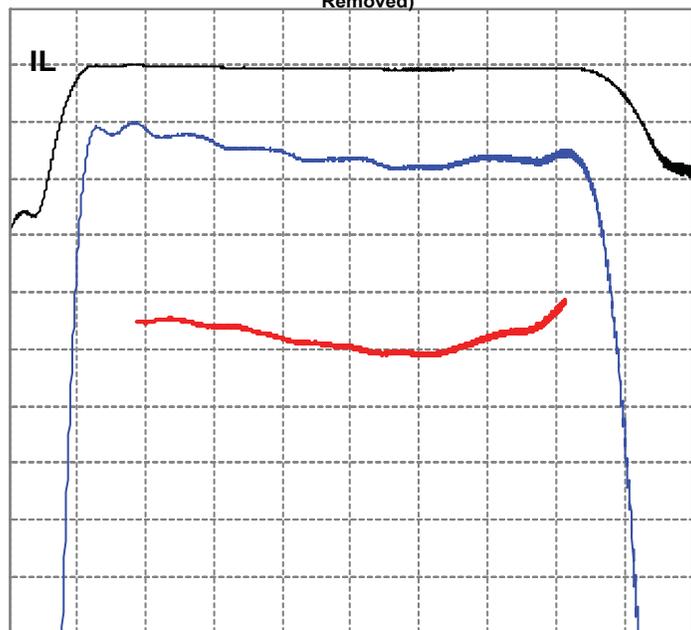
Parameter	Symbol	Unit	
Component			101528
Center Frequency	F_0	MHz defined	1000
Bandwidth	B	MHz defined	550
-3dB Bandwidth	B_3	MHz min	617.5
-40dB Bandwidth	B_{40}	MHz max	685
Delay	T_0	μ sec typ	1.502
Amplitude Ripple		dB _{P-P} max	2
Phase Ripple		deg _{P-P} max	10
Rejection		dB max	-46
Spurious for $ t - T_0 > .9T_0$		dB max	9
Gain		dB min	-6
Power In for -1 dB Comp		dBm min	16
Noise Figure		dB max	10
Return Loss		dB min	10
DC Power	15V @ 1A		

Notes

- Multiple Channel Delay Line Module. Unit consists of four independent identical channels.
- Center Frequency (F_0) and Bandwidth (B) are defined, not measured.
- Gain is the maximum gain for $|f - F_0| < .5B$
- Ripple spec applies to $|f - F_0| < .4B$, and is doubled for $.4B < |f - F_0| < .5B$
- Specifications are at 22 °C only. Unit will operate undamaged from -54 °C to 125 °C with shifts $dF_0 = -x * F_0$, $dT_0 = x * T_0$, where $x = 94E-6 * (\text{temperature} - 22 \text{ °C})$

Typical Performance

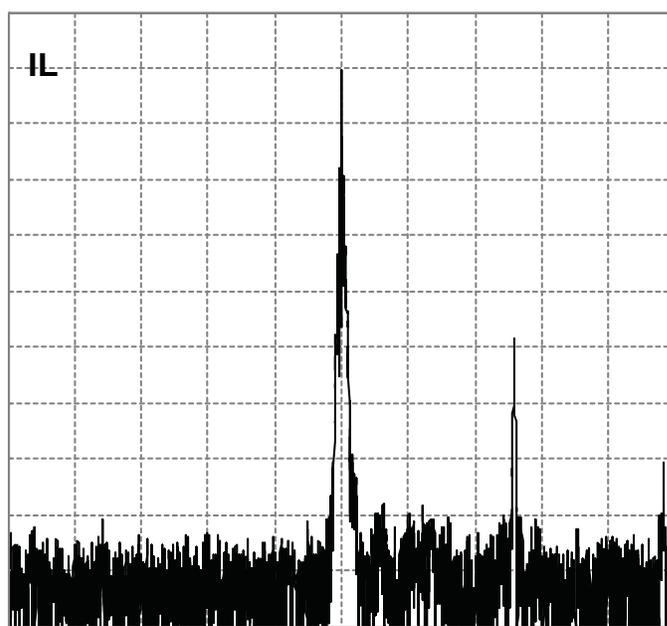
Frequency Response
(Best Fit Linear Phase
Removed)



10 dB/div, 1 dB/div, 10 deg/div, 79.000 MHz/div

Impulse Response

FFT(Frequency Response * Cos(0.5 * PI * MIN(1, MAX(0, |f - F0| * 4.6 / B - 2.3))) ^ 2)

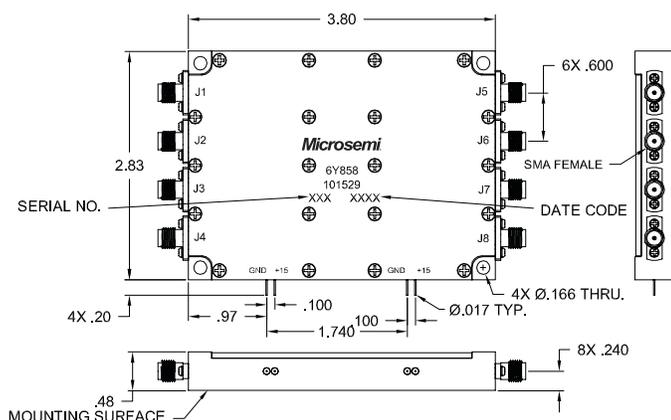


10 dB/div, 0.203 us/div

101529C

LR1000-500-1.5 Multiple Channel Delay Line Module

Package Outline



System Block Diagram

