

CL1L, CL2L series, surface-mount thin film delay lines



This series permits ultra-precision timing adjustment from 20 to 200 picoseconds with accuracy of ±picoseconds for ultrahigh-speed signal processing applications.

Differential delay line:CL2L

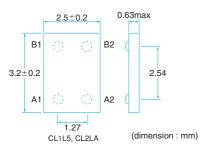
RoHS compliant

Completely lead fre



SPECIFICATIONS

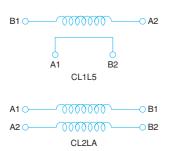
Mechanical



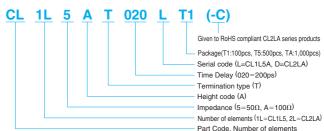


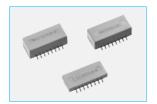
| Type | CL1L5 | CL2LA | |
|--------------------------|---|---------------------------|--|
| Time Delay | 40~220ps(20ps step) | | |
| Time Delay Tolerance | ±10% | | |
| Temp. coefficient of Td | ±100ppm/°C | | |
| Characteristic Impedance | 50Ω±10% | 100Ω±10% | |
| DC Resistance | 0.3Ω (100ps or less) $3.0\Omega/\text{ns}$ max (100ps or more) | 1.0 Ω Max. | |
| Insertion loss | 0.5dB or less (at 0.75GHz) | 0.5dB or less (at 1.0GHz) | |
| Rated Current | 100mA | | |
| Rated Current | −40°C~85°C | | |

Equivalent circuit









GL1L/GL2L series, SOP(small outline package) thin film differential delay lines

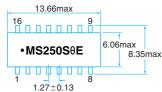
Electrical



These delay lines offer the same excellent frequency performance as SIP delay lines but come in a gullwinged surface mount package. The differential SMT is useful for PECL application, and contains two identical transmission lines matched for the time delay. Featuring a stripline shielded construction, these parts offer very low EMI/RFI, and are ideal for high frequency/tight tolerance timing and deskew applications.

SPECIFICATIONS



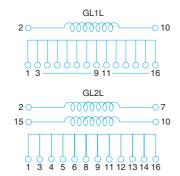


| 000 | 0000 | Н |
|---------|------------|-------|
| 0.56max | (dimension | : mm) |

| Time Delay | Н | Code |
|------------|---------|------|
| 0.1~1.0ns | 2.37max | L |
| 1 1~5 0ne | 4.85may | М |

| Type | GL1L | GL2L |
|--------------------------|--------------------------|-----------------------|
| Time Delay | 0.1~5.0ns(0.1ns step) | 0.1~3.0ns(0.1ns step) |
| Time Delay | 0.1° 5.0118(0.1118 step) | 3.5~4.5ns(0.5ns step) |
| Time Delay Tolerance | | ±0.05ns(0.1~2.9ns) |
| | ±0.05ns | -0.5/+0.1ns(3.0ns) |
| | | ±0.1ns(3.5~4.5ns) |
| Temp. coefficient of Td | 0~150ppm/°C | |
| Characteristic Impedance | $50{\pm}5\Omega$ | |
| Rise/fall time | 200ps/ns | |
| Rated Currrent | 100mA | |
| Characteristic Impedance | −25~85°C | |

Equivalent circuit





GL1L 5 M S 250 S -T* (-C)

Given to RoHS compliant products

Package(T1:100pcs, T5:500pcs)

Circuit: S(GL1L),D(GL2L)

Time Delay: (250=2.50ns)

Lead Frame

Height code

Impedance: (5=50V)

Part Code

