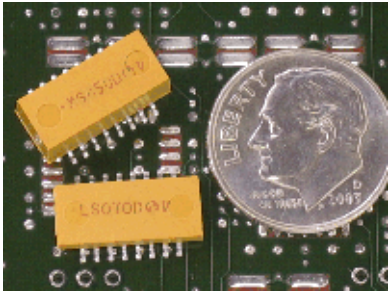


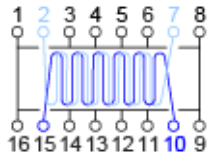
Description



This family of delay lines features high bandwidth performance with high reliability for timing control applications. They feature stripline shielded construction on ceramic with equally distributed capacitance for superior performance. These SMT differential products are useful in PECL applications and they contain two identical transmission lines matched for time delay. This multilayer approach features very low EMI/RFI and they are ideal for tight tolerance timing and data deskew applications. Products are offered in a 16 pin transfer molded package with solder coated Gull Wing leads. These products provide space savings for height when compared to SIP products.

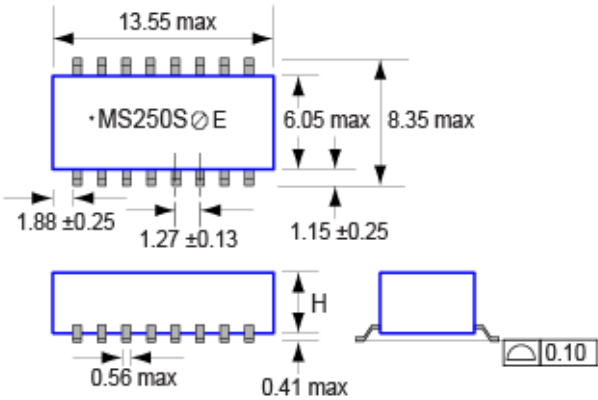
This product is currently available with solder finishes of Sn63/Pb37, as well as a RoHS compliant solder finish of Sn95.5/Ag3.8/Cu0.7. For the RoHS compliant part, the customer must specify this upon ordering by following the instructions in the part numbering section of this specification.

Electrical



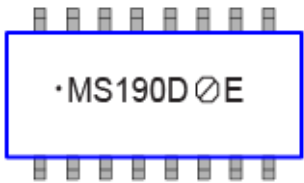
Time delay (td)	0.1 to 4.5 ns
Time delay tolerance	0.1 to 2.9ns: ±0.05 ns 3.0ns: -0.05 ns,+0.10 ns 3.5 to 4.5 ns: ±0.10 ns
Time delay increment	0.1ns steps (< 3.0 ns) 0.5ns steps (> 3.0 ns)
Impedance	50 Ω ±5 Ω
DC resistance	0.1 to 1.0 ns: 1.0 Ω max 1.0 to 4.5 ns: 1.0 Ω/ns max
Rated current	100 mA
Temp. coef. of td	< 150 ppm/°C
Isolation resistance	> 100 MΩ @ 50 Vdc
Operating temperature	-40 to +85 °C
Storage temperature	-55 to +125 °C

Mechanical



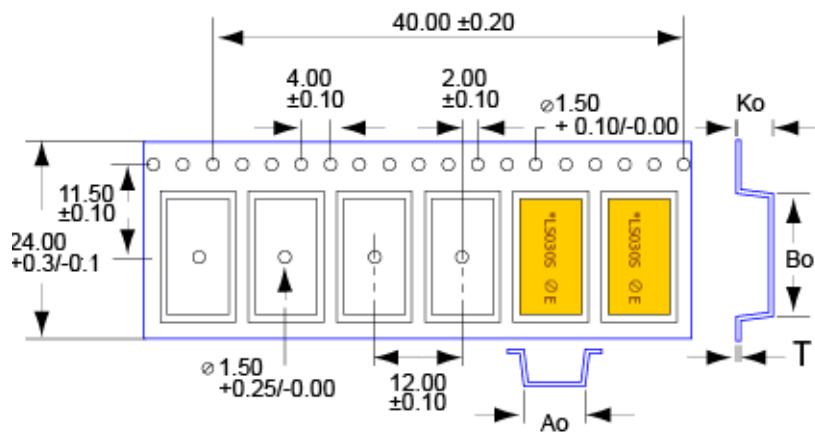
Form Factor		
Td	Height (H)	Code
0.1 - 1.0 ns	2.37 max	L
1.1 - 4.5 ns	4.85 max	M

Marking



Marking shall include:
a pin one identifier
the characters MS or LS (LS for products with a time delay of 0.1 to 1.0 ns
MS for products with a time delay of 1.1 to 5.0 ns
the final four parts of the part number
TFT "don't stop" logo
TFT 1 digit monthly date code

Packaging



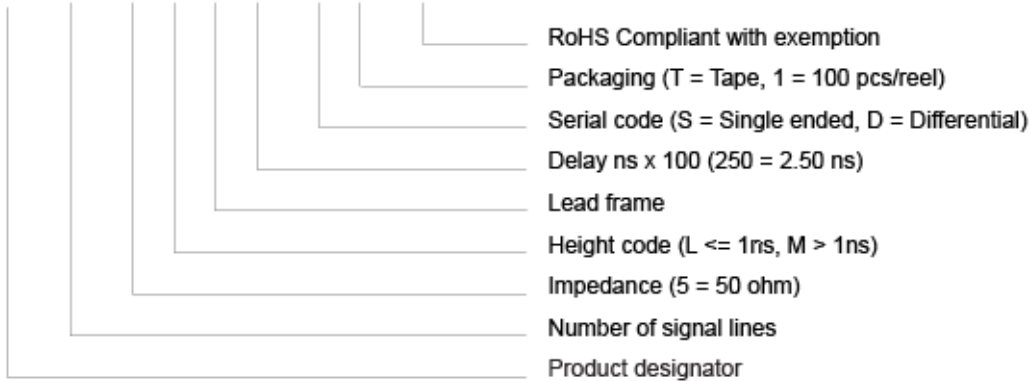
Packaging Specification

General Guidelines & Recommendations

General Drawing Notes	<ul style="list-style-type: none"> All dimensions are in mm. Not drawn to scale. 		
Drawing Dimensional Call-outs	LS Carrier Type	MS Carrier Type	
	<ul style="list-style-type: none"> $Ao = 8.510 \pm 0.100$ $Bo = 14.200 \pm 0.100$ $Ko = 3.000 \pm 0.100$ $T = 0.343 \pm 0.013$ 	<ul style="list-style-type: none"> 8.430 ± 0.100 13.720 ± 0.100 5.310 ± 0.100 0.356 ± 0.013 	
Packaging Materials	<ul style="list-style-type: none"> Carrier tape part #: US044441 For GL2L5LS***D Carrier tape part #: US042911 For GL2L5MS***D Cover tape part #: Vendor determined. Reel size: Quantity dependent. 		
Packaging Requirements	<ul style="list-style-type: none"> All taping done in accordance with EIA 481 standards. Pieces taped with the marking up (non-electrode side) and showing through the cover tape (as shown in the above drawing). 		
Labeling Requirements	<ul style="list-style-type: none"> Labels will contain the TFT taped part number and quantity of pieces taped. Refer to the TFT Taped Part Numbering section for part numbers. 		

Part Number

GL 2L 5 M S *** S -T1 -C



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