



End of Life Notification

August 17th, 2012

To: To whom it may concern:

Re: PCN for EOL of DL1L5*K delay line series.

All DL1L5*K parts, except those in current inventory, will no longer be available to order after December 31, 2012. TFT is eliminating the manufacturing of its DL1L5*K delay line series. These products are not planning to be replaced by a new part number.

The delay line families affected by this change include the products starting with the following prefixes :

- DL1L5*K Where the * = can be one of the following letters W , X, Y, Z, O or numbers 3, 4, 5.

All last time orders for these parts must be placed before the December 31, 2012. All parts ordered must be delivered by March 31, 2013.

All products currently in stock will be available until the stock is gone. The MOQ of 100 pcs will be enforced unless the remaining stock is less than 100 pcs.

If you have any further questions regarding this issue please contact your TFT Sales Person or Customer Service Representative.

Best Regards,

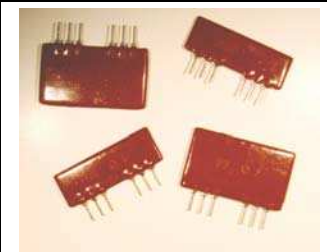
Tim Goertzen

Tim Goertzen
Inside Sales Manager
Thin Film Technology Corporation
tel: (507)625-8445 x 25
fax: (507)625-3523
email: tgoertzen@thin-film.com



Product Family: [6-pin Through Hole Delay Line](#)

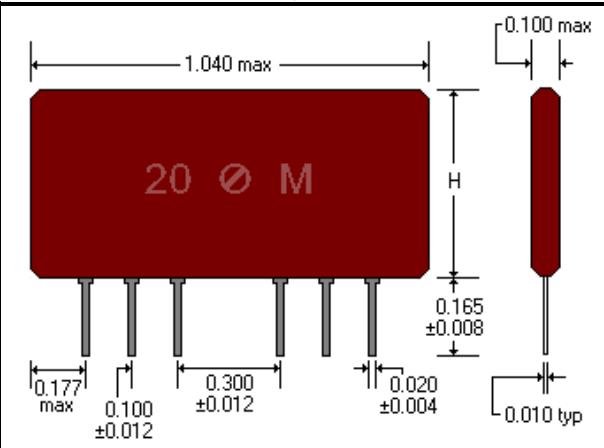
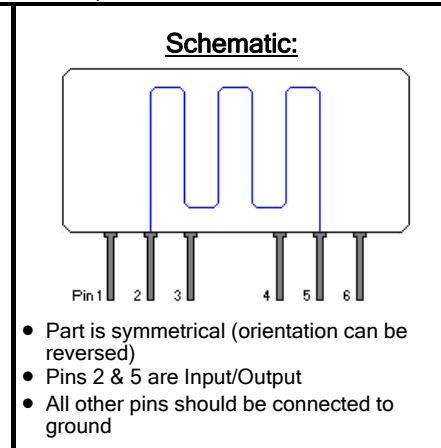
Part Number Series: [DL1L5, 6-pin Series](#)

	<p>Construction:</p> <ul style="list-style-type: none"> High Purity Alumina or Zirconium Substrate 6-pin, through hole configuration Available in RoHS and non-RoHS versions. RoHS version utilizes exemption 7a. 	<p>Features:</p> <ul style="list-style-type: none"> Single-ended (1 delay element) Time delays of 0.1ns to 5.1ns Tolerances as tight as $\pm 0.05\text{ns}$ 50Ω impedance High volume production suitable for commercial and special applications
--	---	--

Description:

These 6-pin delay lines offer excellent performance and small size. The micro-strip construction is ideal for high frequency and tight tolerance timing and deskew applications. The performance of these equally distributed capacitance delay lines is significantly better than lumped element delay lines and the physical size is much smaller than delays obtained by using cable.

Product Dimensions, Schematic and Marking (All dimensions are shown in inches):

 <p>Dimensions shown include: 1.040 max (length), 0.100 max (height), 0.165 ±0.008 (height), 0.100 max (height), 0.177 max (pin length), 0.100 ±0.012 (pin length), 0.300 ±0.012 (pin length), 0.020 ±0.004 (pin length), 0.010 typ (pin length).</p>	<table border="1"> <thead> <tr> <th>Time Delay</th> <th>"H" dimension (Height Code)</th> </tr> </thead> <tbody> <tr> <td>0.1~0.5ns</td> <td>0.300 max. (WK)</td> </tr> <tr> <td>0.6~2.6ns</td> <td>0.400 max. (XK)</td> </tr> <tr> <td>2.7~3.5ns</td> <td>0.550 max. (YK)</td> </tr> <tr> <td>3.6~5.1ns</td> <td>0.650 max. (ZK)</td> </tr> </tbody> </table> <p>Product marking will be composed of the following:</p> <ul style="list-style-type: none"> 2-digit time delay code representing full and tenths of nanoseconds (ie 20=2.0ns) TFT "Don't Stop" logo 1-digit manufacturing code 	Time Delay	"H" dimension (Height Code)	0.1~0.5ns	0.300 max. (WK)	0.6~2.6ns	0.400 max. (XK)	2.7~3.5ns	0.550 max. (YK)	3.6~5.1ns	0.650 max. (ZK)	<p>Schematic:</p>  <ul style="list-style-type: none"> Part is symmetrical (orientation can be reversed) Pins 2 & 5 are Input/Output All other pins should be connected to ground
Time Delay	"H" dimension (Height Code)											
0.1~0.5ns	0.300 max. (WK)											
0.6~2.6ns	0.400 max. (XK)											
2.7~3.5ns	0.550 max. (YK)											
3.6~5.1ns	0.650 max. (ZK)											

DS-S Series Part Numbering: Ex: DL1L5XK200S-C

Product Designator	Number of Elements	Impedance Code	Package Code and Height	Time Delay	Delay Type	RoHS Indicator
DL	1L = 1	5 = 50 Ω	WK = 0.300" XK = 0.400" YK = 0.550" ZK = 0.650"	Three numeric characters representing nanoseconds x 100 (i.e. 200=2.00ns)	S = Single	-C = RoHS (leave blank for leaded)

Examples:

Part Number	Product Height	Time Delay	Package Qty	RoHS
DL1L5WK040S-C	0.300"	0.4ns	100 pcs/bag	Yes*
DL1L5XK200S	0.400"	2.0ns	100 pcs/bag	No
DL1L5YK300S	0.550"	3.0ns	100 pcs/bag	No
DL1L5ZK510S-C	0.650"	5.1ns	100 pcs/bag	Yes*

* RoHS version utilizes exemption 7a.

Electrical Specifications:

Product Designator -->	DL1L5WK	DL1L5XK				DL1L5YK	DL1L5ZK
Product Height (inches)	0.300	0.400				0.550	0.650
Time Delay	0.1 ~ 0.5ns	0.6 ~ 1.0ns	1.1 ~ 2.0ns	2.1 ~ 2.5ns	2.6ns	2.7 ~ 3.5ns	3.6 ~ 5.1ns
Time delay increments	0.10ns steps						
Time delay tolerance	±0.05ns						
Impedance	50Ω ±10%						
DC Resistance	0.5 Ω max.	1.0 Ω max.				2.0 Ω max.	3.0 Ω max.
Rise Time	0.3ns max.		0.5ns max.	0.7ns max.	1.0ns max.		
Return Loss	<-20dB 700MHz		<-20dB 500MHz	<-20dB 300MHz	<-20dB 100MHz		
Distortion	±5%				±10%		
Rated Current	100 mA						
Temp. coef. of time delay	150 ppm/°C						
Insulation Resistance	100 Vdc (1 minute minimum)						
Isolation Resistance (Sgn-Gnd)	100MΩ minimum @ 50 Vdc						
Operating Temp. Range	-40°C ~ +85°C						
Storage Temp. Range	-55°C ~ +125°C						
Packaging	100 pcs/bag (bag contains tag board to protect leads from bending)					50 pcs/bag (bag contains tag board to protect leads from bending)	