

# 8 Pin Mini DIP and Mini DIL 5 Tap TTL Compatible Active Delay Lines EP9458-XXW & EP9458-XXW-LF

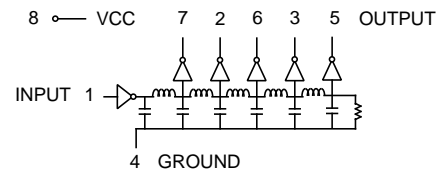
Add "-LF" after part number for Lead-Free

PCA Part Number	Tap Delays ( $\pm 5\%$ or $\pm 2nS$ )	Total Delay ( $\pm 5\%$ or $\pm 2nS$ )	PCA Part Number	Tap Delays ( $\pm 5\%$ or $\pm 2nS$ )	Total Delay ( $\pm 5\%$ or $\pm 2nS$ )
EP9458-25W(-LF)	5, 10, 15, 20	25	EP9458-150W(-LF)	30, 60, 90, 120	150
EP9458-30W(-LF)	6, 12, 18, 24	30	EP9458-175W(-LF)	35, 70, 105, 140	175
EP9458-35W(-LF)	7, 14, 21, 28	35	EP9458-200W(-LF)	40, 80, 120, 160	200
EP9458-40W(-LF)	8, 16, 24, 32	40	EP9458-225W(-LF)	45, 90, 135, 180	225
EP9458-45W(-LF)	9, 18, 27, 36	45	EP9458-250W(-LF)	50, 100, 150, 200	250
EP9458-50W(-LF)	10, 20, 30, 40	50	EP9458-300W(-LF)	60, 120, 180, 240	300
EP9458-60W(-LF)	12, 24, 36, 48	60	EP9458-350W(-LF)	70, 140, 210, 280	350
EP9458-75W(-LF)	15, 30, 45, 60	75	EP9458-400W(-LF)	80, 160, 240, 320	400
EP9458-100W(-LF)	20, 40, 60, 80	100	EP9458-450W(-LF)	90, 180, 270, 360	450
EP9458-125W(-LF)	25, 50, 75, 100	125	EP9458-500W(-LF)	100, 200, 300, 400	500

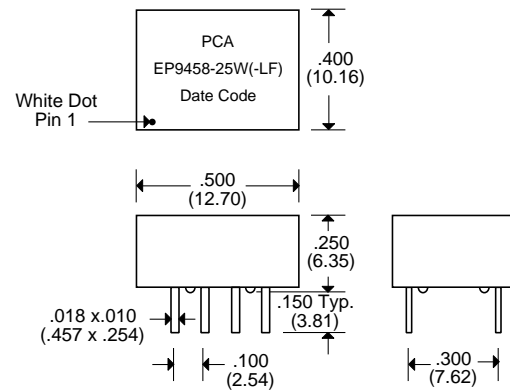
† Whichever is greater. Delay times referenced from input to leading and trailing edges at 25°C, 5.0V, with no load.

DC Electrical Characteristics		Test Conditions	Min.	Max.	Unit
Parameter					
V <sub>OH</sub>	High-Level Output Voltage	V <sub>CC</sub> = min. V <sub>IL</sub> = max. I <sub>OH</sub> = max	2.7		V
V <sub>OL</sub>	Low-Level Output Voltage	V <sub>CC</sub> = min. V <sub>IH</sub> = min. I <sub>OL</sub> = max		0.5	V
V <sub>IK</sub>	Input Clamp Voltage	V <sub>CC</sub> = min. I <sub>I</sub> = I <sub>IK</sub>		-1.2	V
I <sub>IH</sub>	High-Level Input Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 2.7V		50	μA
		V <sub>CC</sub> = max. V <sub>IN</sub> = 5.25V		1.0	mA
I <sub>IL</sub>	Low-Level Input Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 0.5V		-2	mA
I <sub>OS</sub>	Short Circuit Output Current	V <sub>CC</sub> = max. V <sub>OUT</sub> = 0.	-40	-100	mA
		(One output at a time)			
I <sub>CCH</sub>	High-Level Supply Current	V <sub>CC</sub> = max. V <sub>IN</sub> = OPEN		75	mA
I <sub>CCL</sub>	Low-Level Supply Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 0		75	mA
T <sub>RO</sub>	Output Rise Time	T <sub>d</sub> 500 nS (0.75 to 2.4 Volts)		4	nS
N <sub>H</sub>	Fanout High-Level Output	V <sub>CC</sub> = max. V <sub>OH</sub> = 2.7V		20 TTL Load	
N <sub>L</sub>	Fanout Low-Level Output	V <sub>CC</sub> = max. V <sub>OL</sub> = 0.5V		10 TTL Load	

### Schematic



### Package



Recommended Operating Conditions	Min.	Max.	Unit	
V <sub>CC</sub>	Supply Voltage	4.75	5.25	V
V <sub>IH</sub>	High-Level Input Voltage	2.0		V
V <sub>IL</sub>	Low-Level Input Voltage		0.8	V
I <sub>IK</sub>	Input Clamp Current		-18	mA
I <sub>OH</sub>	High-Level Output Current		-1.0	mA
I <sub>OL</sub>	Low-Level Output Current		20	mA
PW*	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T <sub>A</sub>	Operating Free-Air Temperature	0	+70	°C

\*These two values are inter-dependent.

Input Pulse Test Conditions @ 25° C		Unit	
E <sub>IN</sub>	Pulse Input Voltage	3.2	Volts
PW	Pulse Width % of Total Delay	110	%
T <sub>RI</sub>	Pulse Rise Time (0.75 - 2.4 Volts)	2.0	nS
PRR	Pulse Repetition Rate @ T <sub>d</sub> 200 nS	1.0	MHz
	Pulse Repetition Rate @ T <sub>d</sub> > 200 nS	100	KHz
V <sub>CC</sub>	Supply Voltage	5.0	Volts

Notes :	EP9458W-XX	EP9458-XXW-LF
1. Lead Finish	SnPb	Hot Tin Dip (Sn)
2. Peak Solder Rating (Wave Solder Process)	260°C 10 (+2/-0) seconds	260°C 10 (+2/-0) seconds
4. Weight	TBD grams	TBD grams
5. Packaging Information (Tube)	TBD pieces/tube	TBD pieces/tube

Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25