8 Pin Mini DIP and Mini DIL 5 Tap TTL Compatible Active Delay Lines

EP9458-XX & EP9458-XX-LF

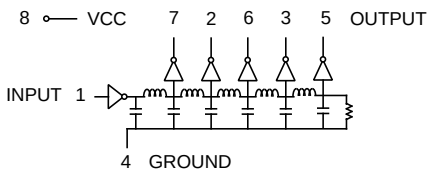
Add “-LF” after part number for Lead-Free

PCA Part Number	Tap Delays (†±5% or ± 2nS)	Total Delay (†±5% or ± 2nS)	PCA Part Number	Tap Delays (†±5% or ± 2nS)	Total Delay (†±5% or ± 2nS)
EP9458-25(-LF)	5, 10, 15, 20	25	EP9458-150(-LF)	30, 60, 90, 120	150
EP9458-30(-LF)	6, 12, 18, 24	30	EP9458-175(-LF)	35, 70, 105, 140	175
EP9458-35(-LF)	7, 14, 21, 28	35	EP9458-200(-LF)	40, 80, 120, 160	200
EP9458-40(-LF)	8, 16, 24, 32	40	EP9458-225(-LF)	45, 90, 135, 180	225
EP9458-45(-LF)	9, 18, 27, 36	45	EP9458-250(-LF)	50, 100, 150, 200	250
EP9458-50(-LF)	10, 20, 30, 40	50	EP9458-300(-LF)	60, 120, 180, 240	300
EP9458-60(-LF)	12, 24, 36, 48	60	EP9458-350(-LF)	70, 140, 210, 280	350
EP9458-75(-LF)	15, 30, 45, 60	75	EP9458-400(-LF)	80, 160, 240, 320	400
EP9458-100(-LF)	20, 40, 60, 80	100	EP9458-450(-LF)	90, 180, 270, 360	450
EP9458-125(-LF)	25, 50, 75, 100	125	EP9458-500(-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 Parameter		Test Conditions	Min.	Max.	Unit
V_{OH}	High-Level Output Voltage	V_{CC} = min. V_{IL} = max. I_{OH} = max	2.7		V
V_{OL}	Low-Level Output Voltage	V_{CC} = min. V_{IH} = min. I_{OL} = max		0.5	V
V_{IK}	Input Clamp Voltage	V_{CC} = min. I_I = II_K		-1.2	V
I_{IH}	High-Level Input Current	V_{CC} = max. V_{IN} = 2.7V		50	µA
		V_{CC} = max. V_{IN} = 5.25V		1.0	mA
I_{IL}	Low-Level Input Current	V_{CC} = max. V_{IN} = 0.5V		-2	mA
I_{OS}	Short Circuit Output Current	V_{CC} = max. V_{OUT} = 0. (One output at a time)	-40	-100	mA
I_{CCH}	High-Level Supply Current	V_{CC} = max. V_{IN} = OPEN		75	mA
I_{CCL}	Low-Level Supply Current	V_{CC} = max. V_{IN} = 0		75	mA
T_{RO}	Output Rise Time	Td ≤ 500 nS (0.75 to 2.4 Volts)		4	nS
N_H	Fanout High-Level Output	V_{CC} = max. V_{OH} = 2.7V		20 TTL Load	
N_L	Fanout Low-Level Output	V_{CC} = max. V_{OL} = 0.5V		10 TTL Load	

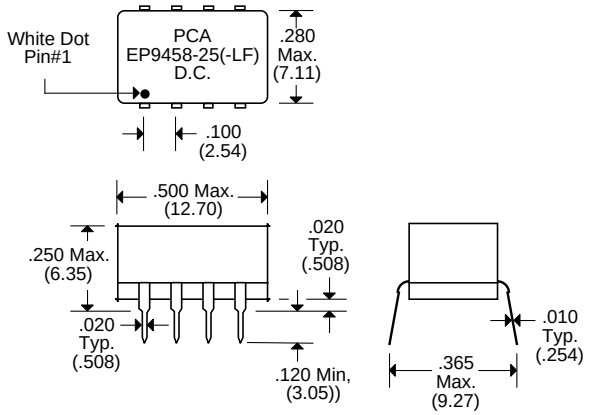
Schematic



Recommended Operating Conditions		Min.	Max.	Unit
V_{CC}	Supply Voltage	4.75	5.25	V
V_{IH}	High-Level Input Voltage	2.0		V
V_{IL}	Low-Level Input Voltage		0.8	V
I_{IK}	Input Clamp Current		-18	mA
I_{OH}	High-Level Output Current		-1.0	mA
I_{OL}	Low-Level Output Current		20	mA
P_W*	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T_A	Operating Free-Air Temperature	0	+70	°C

**These two values are inter-dependent.*

Package



Input Pulse Test Conditions @ 25° C			Unit
E_{IN}	Pulse Input Voltage	3.2	Volts
P_W	Pulse Width % of Total Delay	110	%
T_{RI}	Pulse Rise Time (0.75 - 2.4 Volts)	2.0	nS
P_{RR}	Pulse Repetition Rate @ Td ≤ 200 nS	1.0	MHz
	Pulse Repetition Rate @ Td > 200 nS	100	KHz
V_{CC}	Supply Voltage	5.0	Volts

Notes :	EP9458-XX	EP9458-XX-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

PCA ELECTRONICS, INC.
16799 SCHOENBORN ST.
NORTH HILLS, CA 91343

CS9458-XX & -LF Rev. B 12/5/06 RR

TEL: (818) 892-0761
FAX: (818) 894-5791
http://www.pca.com