SMD 8 Pin 5 Tap TTL Compatible Active Delay Lines

EPA1140-XX & EPA1140-XX-RC

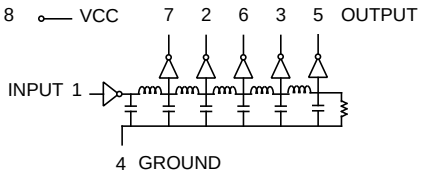
Add "-RC" after part number for RoHS Compliant

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)
EPA1140-25(-RC)	5, 10, 15, 20	25	EPA1140-150(-RC)	30, 60, 90, 120	150
EPA1140-30(-RC)	6, 12, 18, 24	30	EPA1140-175(-RC)	35, 70, 105, 140	175
EPA1140-35(-RC)	7, 14, 21, 28	35	EPA1140-200(-RC)	40, 80, 120, 160	200
EPA1140-40(-RC)	8, 16, 24, 32	40	EPA1140-225(-RC)	45, 90, 135, 180	225
EPA1140-45(-RC)	9, 18, 27, 36	45	EPA1140-250(-RC)	50, 100, 150, 200	250
EPA1140-50(-RC)	10, 20, 30, 40	50	EPA1140-300(-RC)	60, 120, 180, 240	300
EPA1140-60(-RC)	12, 24, 36, 48	60	EPA1140-350(-RC)	70, 140, 210, 280	350
EPA1140-75(-RC)	15, 30, 45, 60	75	EPA1140-400(-RC)	80, 160, 240, 320	400
EPA1140-100(-RC)	20, 40, 60, 80	100	EPA1140-450(-RC)	90, 180, 270, 360	450
EPA1140-125(-RC)	25, 50, 75, 100	125	EPA1140-500(-RC)	100, 200, 300, 400	500

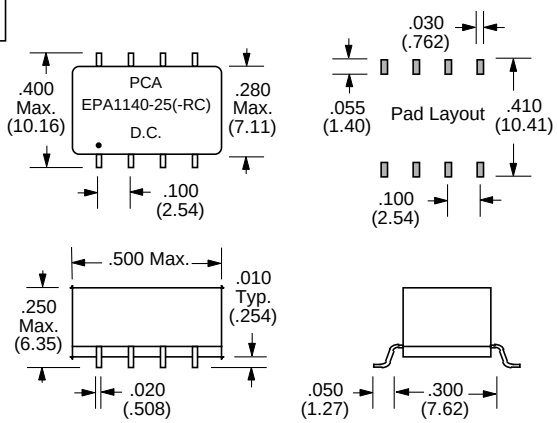
†Whichever is greater. Delay times referenced from input to leading and trailing edges at 25℃, 5.0V, with no load.

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



Package



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	-55	+125	°C

**These two values are inter-dependent.*

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 :		EPA1140-XX	EPA1140-XX-RC
1. Lead Finish		SnPb	Hot Tin Dip (Sn) †
2. Peak Temperature Rating		225°C	260°C
4. Weight		.976 grams	.976 grams
5. Packaging Information (*Add "TR" to end of part number, but in front of "-RC"when placing order)	(Tube)	TBD pieces/tube	TBD pieces/tube
	(Tape & Reel)	TBD pieces/13" reel (*EPA1140-XXTR)	TBD pieces/13" reel (*EPA1140-XXTR-RC)

† Lead Material : Matte Tin with Ni Barrier

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

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