14 Pin SMD Single Output
TTL Compatible Active Delay Lines
EPA810-XX & EPA810-XX-RC

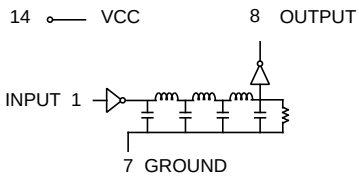
Add “-RC” after part number for RoHS Compliant

PCA Part Number	Time Delays (†±5% or ± 2nS)	PCA Part Number	Time Delays (†±5% or ± 2nS)	PCA Part Number	Time Delays (†±5% or ± 2nS)
EPA810-5(-RC)	5	EPA810-22(-RC)	22	EPA810-95(-RC)	95
EPA810-6(-RC)	6	EPA810-23(-RC)	23	EPA810-100(-RC)	100
EPA810-7(-RC)	7	EPA810-24(-RC)	24	EPA810-125(-RC)	125
EPA810-8(-RC)	8	EPA810-25(-RC)	25	EPA810-150(-RC)	150
EPA810-9(-RC)	9	EPA810-30(-RC)	30	EPA810-175(-RC)	175
EPA810-10(-RC)	10	EPA810-35(-RC)	35	EPA810-200(-RC)	200
EPA810-11(-RC)	11	EPA810-40(-RC)	40	EPA810-225(-RC)	225
EPA810-12(-RC)	12	EPA810-45(-RC)	45	EPA810-250(-RC)	250
EPA810-13(-RC)	13	EPA810-50(-RC)	50	EPA810-275(-RC)	275
EPA810-14(-RC)	14	EPA810-55(-RC)	55	EPA810-300(-RC)	300
EPA810-15(-RC)	15	EPA810-60(-RC)	60	EPA810-350(-RC)	350
EPA810-16(-RC)	16	EPA810-65(-RC)	65	EPA810-400(-RC)	400
EPA810-17(-RC)	17	EPA810-70(-RC)	70	EPA810-500(-RC)	500
EPA810-18(-RC)	18	EPA810-75(-RC)	75	EPA810-600(-RC)	600
EPA810-19(-RC)	19	EPA810-80(-RC)	80	EPA810-700(-RC)	700
EPA810-20(-RC)	20	EPA810-85(-RC)	85	EPA810-800(-RC)	800
EPA810-21(-RC)	21	EPA810-90(-RC)	90	EPA810-900(-RC)	900
				EPA810-1000(-RC)	1000

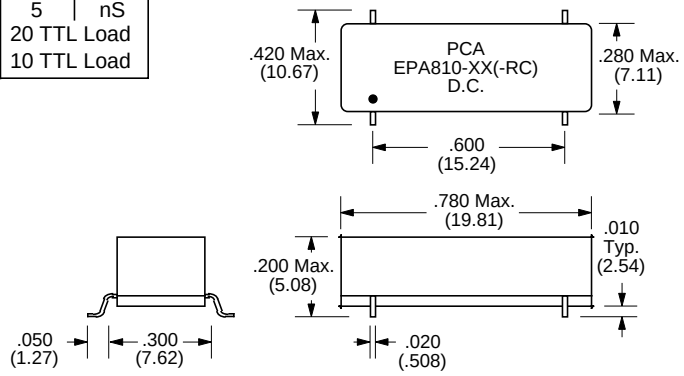
†Whichever is greater. • Delay times referenced from input to leading edges at 25°C, 5.0V, with no load.

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 = I_{IK}		-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
		Td > 500 nS		5	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	0	+70	°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 :		EPA810-XX	EPA810-XX-RC
1. Assembly Process (Solder Composition)	(Leadframe)	SnPb	Sn
	(Assembly Solder)	SnPb	SnPb (RoHS exemption 7a)
2. Peak Solder Rating (per IPC/JEDEC J-STD-020C)		225°C	260°C
3. Moisture Sensitive Levels (MSL) (per IPC/JEDEC J-STD-020C)		3 (168 hours, ≤30°C/60%RH)	4 (72 hours, ≤30°C/60%RH)
4. Weight		TBD grams	TBD grams
5. Packaging Information	(Tube)	25 pieces/tube	25 pieces/tube

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

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Product performance is limited to specified parameters. Data is subject to change without prior notice.

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