

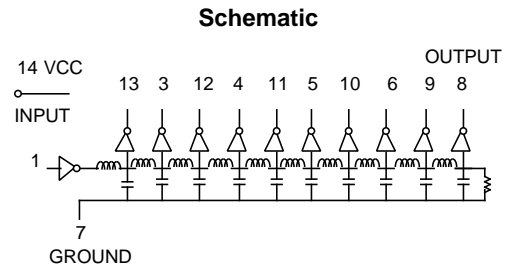
14 Pin DIP 10 Tap TTL Compatible Active Delay Lines EP83XX & EP83XX-RC

Add "-RC" after part number for RoHS Compliant

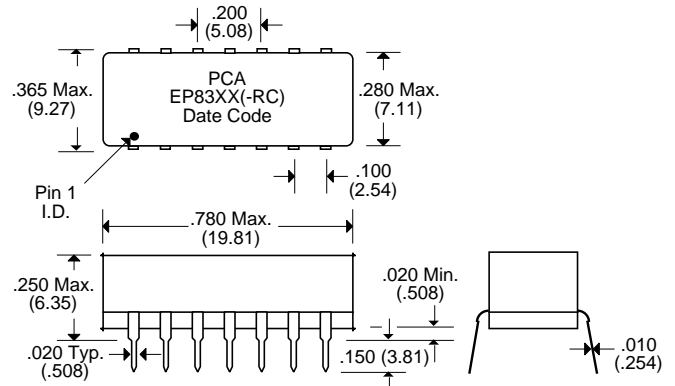
PCA Part Number	Tap Delays ($\pm 5\%$ or $\pm 2\text{nS}$)	Total Delay ($\pm 5\%$ or $\pm 2\text{nS}$)	PCA Part Number	Tap Delays ($\pm 5\%$ or $\pm 2\text{nS}$)	Total Delay ($\pm 5\%$ or $\pm 2\text{nS}$)
EP8301(-RC)	5	50	EP8322(-RC)	44	440
EP8311(-RC)	6	60	EP8309(-RC)	45	450
EP8317(-RC)	7.5	75	EP8323(-RC)	47	470
EP8302(-RC)	10	100	EP8310(-RC)	50	500
EP8319(-RC)	12.5	125	EP8330(-RC)	55	550
EP8303(-RC)	15	150	EP8324(-RC)	60	600
EP8320(-RC)	17.5	175	EP8331(-RC)	65	650
EP8304(-RC)	20	200	EP8325(-RC)	70	700
EP8321(-RC)	22.5	225	EP8329(-RC)	75	750
EP8305(-RC)	25	250	EP8326(-RC)	80	800
EP8306(-RC)	30	300	EP8332(-RC)	85	850
EP8307(-RC)	35	350	EP8327(-RC)	90	900
EP8308(-RC)	40	400	EP8333(-RC)	95	950
EP8318(-RC)	42	420	EP8328(-RC)	100	1000

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

DC Electrical Characteristics		Test Conditions	Min.	Max.	Unit
Parameter					
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.	-40	-100	mA
		(One output at a time)			
I _{CCH}	High-Level Supply Current	V _{CC} = max. V _{IN} = OPEN		150	mA
I _{CCL}	Low-Level Supply Current	V _{CC} = max. V _{IN} = 0		150	mA
T _{RO}	Output Rise Time	T _d 500 nS (0.75 to 2.4 Volts)		4	nS
		T _d > 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	



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 @ T _d 200 nS	1.0	MHz
	Pulse Repetition Rate @ T _d > 200 nS	100	KHz
V _{CC}	Supply Voltage	5.0	Volts

Notes :	EP83XX	EP83XX-RC
1. Assembly Process (Leadframe)	SnPb	Sn
(Solder Composition) (Assembly Solder)	SnPb	SnPb (RoHS exemption 7a)
2. Peak Solder Rating (per IPC/JESD22-B106-B)	260°C	260°C
	10 (+2/-0) seconds	10 (+2/-0) seconds
3. Moisture Sensitive Levels (MSL) (per IPC/JESD22-B106-B)	3 (168 hours, 30°C/60%RH)	4 (72 hours, 30°C/60%RH)
4. Weight	2.0 grams	2.0 grams
5. Packaging Information (Tube)	27 pieces/tube	27 pieces/tube

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