SMD 14 Pin 10 Tap
TTL Compatible Active Delay Lines
EPA247-XX & EPA247-XX-RC

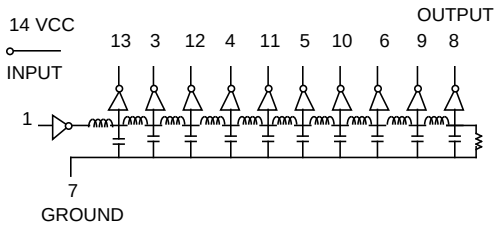
Add “-RC” after part number for RoHS Compliant

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)
EPA247-50(-RC)	5	50	EPA247-440(-RC)	44	440
EPA247-60(-RC)	6	60	EPA247-450(-RC)	45	450
EPA247-75(-RC)	7.5	75	EPA247-470(-RC)	47	470
EPA247-100(-RC)	10	100	EPA247-500(-RC)	50	500
EPA247-125(-RC)	12.5	125	EPA247-550(-RC)	55	550
EPA247-150(-RC)	15	150	EPA247-600(-RC)	60	600
EPA247-175(-RC)	17.5	175	EPA247-650(-RC)	65	650
EPA247-200(-RC)	20	200	EPA247-700(-RC)	70	700
EPA247-225(-RC)	22.5	225	EPA247-750(-RC)	75	750
EPA247-250(-RC)	25	250	EPA247-800(-RC)	80	800
EPA247-300(-RC)	30	300	EPA247-850(-RC)	85	850
EPA247-350(-RC)	35	350	EPA247-900(-RC)	90	900
EPA247-400(-RC)	40	400	EPA247-950(-RC)	95	950
EPA247-420(-RC)	42	420	EPA247-1000(-RC)	100	1000

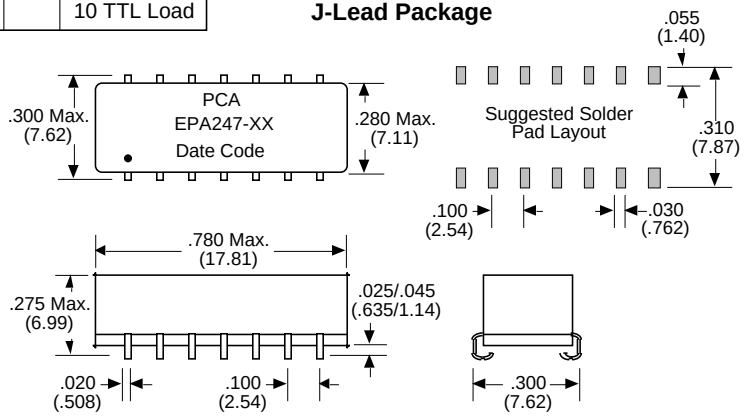
†Whichever is greater. Delay times referenced from input to leading edges at 25°C, 5.0V, with no load.

DC Electrical Characteristics 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		150	mA
I_{CCL}	Low-Level Supply Current	V_{CC} = max. V_{IN} = 0		150	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



J-Lead 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 :		EPA247-XX	EPA247-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 (*Add “TR” to end of part number when placing order)	(Tube)	27 pieces/tube	27 pieces/tube
	(Tape & Reel)	TBD pieces/13” reel (*EPA245-XX-TR)	TBD pieces/13” reel (*EPA245-XX-RCTR)

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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