

SO SMD 14 Pin Single Output Fast TTL Compatible Active Delay Line

EPA3940-12 & EPA3940-RC

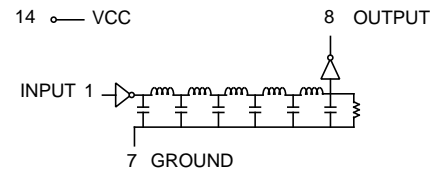
Add "-RC" after part number for RoHS Compliant

Output	
12 nS ± 1 nS	

• Delay Times referenced from input to leading edges at 25°C, 5.0 V •

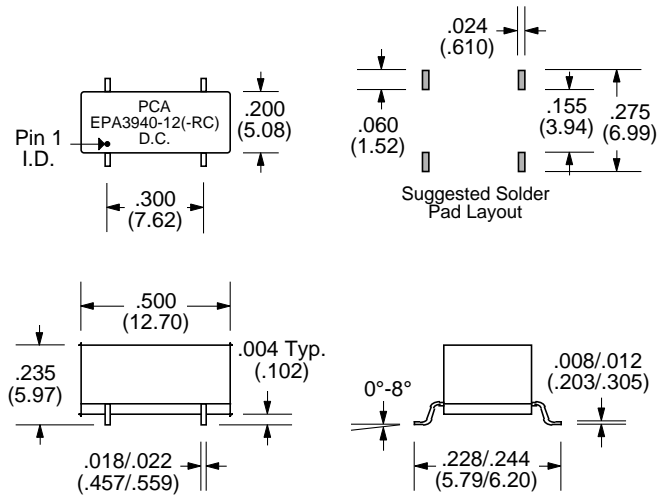
DC Electrical Characteristics					
Parameter	Test Conditions	Min	Max	Unit	
V _{OH}	High-Level Output Voltage	V _{CC} = min. V _{IL} = max. I _{OH} = max	2.7		V
V _{OL}	Low-Level Output Voltage	V _{CC} = min. V _{IH} = min. I _{OL} = max		0.5	V
V _{IK}	Input Clamp Voltage	V _{CC} = min. I _I = I _{IK}		-1.2	V
I _{IH}	High-Level Input Current	V _{CC} = max. V _{IN} = 2.7V		20	µA
I _{IL}	Low-Level Input Current	V _{CC} = max. V _{IN} = 0.5V		-0.6	mA
I _{OS}	Short Circuit Output Current	V _{CC} = max. V _{OUT} = 0.	-60	-150	mA
I _{CCH}	High-Level Supply Current	V _{CC} = max. V _{IN} = OPEN		25	mA
I _{CCL}	Low-Level Supply Current	V _{CC} = max. V _{IN} = 0		40	mA
T _{RO}	Output Rise Time	T _d 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				
Parameter	Test 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

Package



Input Pulse Test Conditions @ 25° C				Unit
E _{IN}	Pulse Input Voltage		3.2	Volts
P _W	Pulse Width		12	nS
T _{RI}	Pulse Rise Time (0.75 - 2.4 Volts)		2.0	nS
P _{RR}	Pulse Repetition Rate		20	MHz
V _{CC}	Supply Voltage		5.0	Volts

Notes :	EPA3940-12	EPA3940-12-RC
1. Assembly Process (Solder Composition)	(Leadframe)	SnPb
	(Assembly Solder)	SnPb (RoHS exemption 7a)
2. Peak Solder Rating (per IPC/JEDEC-J-STD-020C)	260°C 10 (+2/-0) seconds	260°C 10 (+2/-0) seconds
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)	44 pieces/tube
	(Tape & Reel)	TBD pieces/13" reel (*EPA3940-12-TR)

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