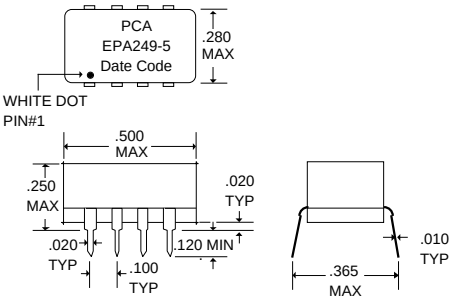
8 Pin Triple TTL Compatible Active Delay Lines

Delay Time ±5% or ±2nS†	DIP Part Number	SMD-G Part Number	SMD-J Part Number	Delay Time ±5% or ±2nS†	DIP Part Number	SMD-G Part Number	SMD-J Part Number
5	EPA249-5	EPA249G-5	EPA249J-5	23	EPA249-23	EPA249G-23	EPA249J-23
6	EPA249-6	EPA249G-6	EPA249J-6	24	EPA249-24	EPA249G-24	EPA249J-24
7	EPA249-7	EPA249G-7	EPA249J-7	25	EPA249-25	EPA249G-25	EPA249J-25
8	EPA249-8	EPA249G-8	EPA249J-8	30	EPA249-30	EPA249G-30	EPA249J-30
9	EPA249-9	EPA249G-9	EPA249J-9	35	EPA249-35	EPA249G-35	EPA249J-35
10	EPA249-10	EPA249G-10	EPA249J-10	40	EPA249-40	EPA249G-40	EPA249J-40
11	EPA249-11	EPA249G-11	EPA249J-11	45	EPA249-45	EPA249G-45	EPA249J-45
12	EPA249-12	EPA249G-12	EPA249J-12	50	EPA249-50	EPA249G-50	EPA249J-50
13	EPA249-13	EPA249G-13	EPA249J-13	55	EPA249-55	EPA249G-55	EPA249J-55
14	EPA249-14	EPA249G-14	EPA249J-14	60	EPA249-60	EPA249G-60	EPA249J-60
15	EPA249-15	EPA249G-15	EPA249J-15	65	EPA249-65	EPA249G-65	EPA249J-65
16	EPA249-16	EPA249G-16	EPA249J-16	70	EPA249-70	EPA249G-70	EPA249J-70
17	EPA249-17	EPA249G-17	EPA249J-17	75	EPA249-75	EPA249G-75	EPA249J-75
18	EPA249-18	EPA249G-18	EPA249J-18	80	EPA249-80	EPA249G-80	EPA249J-80
19	EPA249-19	EPA249G-19	EPA249J-19	85	EPA249-85	EPA249G-85	EPA249J-85
20	EPA249-20	EPA249G-20	EPA249J-20	90	EPA249-90	EPA249G-90	EPA249J-90
21	EPA249-21	EPA249G-21	EPA249J-21	95	EPA249-95	EPA249G-95	EPA249J-95
22	EPA249-22	EPA249G-22	EPA249J-22	100	EPA249-100	EPA249G-100	EPA249J-100

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

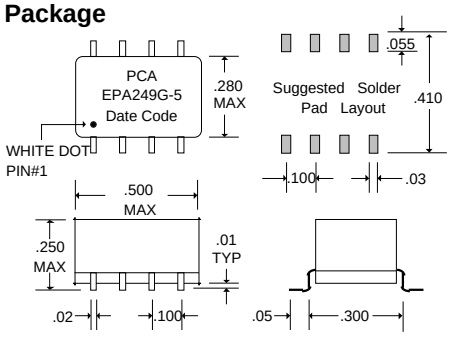
DIP Package



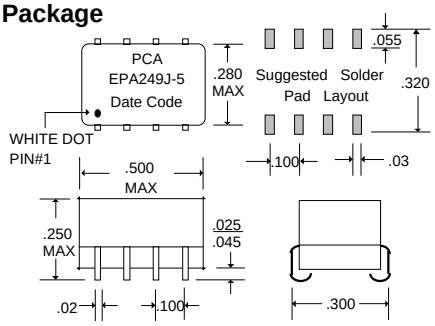
DC Electrical Characteristics

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		-1.2V	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		115	mA
I_{CCL}	Low-Level Supply Current	V_{CC} = max. V_{IN} = 0		115	mA
T_{RO}	Output Rise Time			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	

SMD-G Package



SMD-J Package



Recommended Operating Conditions

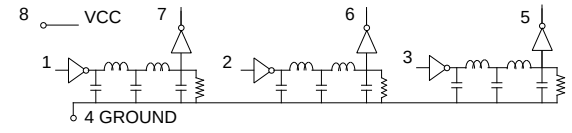
**These two values are inter-dependent.*

		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

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	1.0	MHz
V_{CC}	Supply Voltage	5.0	Volts

Schematic



DSA249 Rev. A 2/5/96

QAF-CSO1 Rev. B 8/25/94

Unless Otherwise Noted Dimensions in Inches
Tolerances:
Fractional = ± 1/32
.XX = ± .030 .XXX = ± .010

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