

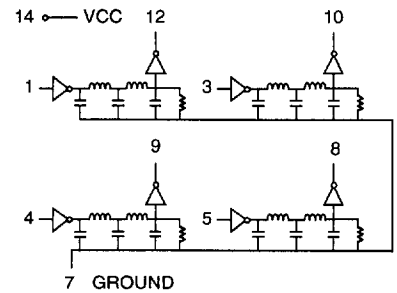
# SMD 14 Pin Gull-Wing Quad TTL Compatible Active Delay Modules

DELAY TIME ±5% or ±2 nS†	PART NUMBER	DELAY TIME ±5 or ±2 nS†	PART NUMBER	DELAY TIME ±5% or ±2 nS†	PART NUMBER
5	EPA366-5	16	EPA366-16	35	EPA366-35
6	EPA366-6	17	EPA366-17	40	EPA366-40
7	EPA366-7	18	EPA366-18	45	EPA366-45
8	EPA366-8	19	EPA366-19	50	EPA366-50
9	EPA366-9	20	EPA366-20	55	EPA366-55
10	EPA366-10	21	EPA366-21	60	EPA366-60
11	EPA366-11	22	EPA366-22	65	EPA366-65
12	EPA366-12	23	EPA366-23	70	EPA366-70
13	EPA366-13	24	EPA366-24	75	EPA366-75
14	EPA366-14	25	EPA366-25		
15	EPA366-15	30	EPA366-30		

† 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 <sub>OH</sub>	High-Level Output Voltage	V <sub>CC</sub> = min. V <sub>IL</sub> = max. I <sub>OH</sub> = max	2.7		V
V <sub>OL</sub>	Low-Level Output Voltage	V <sub>CC</sub> = min. V <sub>IH</sub> = min. I <sub>OL</sub> = max		0.5	V
V <sub>IK</sub>	Input Clamp Voltage	V <sub>CC</sub> = min. I <sub>I</sub> = I <sub>IK</sub>		-1.2V	V
I <sub>IH</sub>	High-Level Input Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 2.7V		50	µA
		V <sub>CC</sub> = max. V <sub>IN</sub> = 5.25V		1.0	mA
I <sub>IL</sub>	Low-Level Input Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 0.5V		-2	mA
I <sub>OS</sub>	Short Circuit Output Current	V <sub>CC</sub> = max. V <sub>OUT</sub> = 0. (One output at a time)	-40	-100	mA
I <sub>CCH</sub>	High-Level Supply Current	V <sub>CC</sub> = max. V <sub>IN</sub> = OPEN		150	mA
I <sub>CCL</sub>	Low-Level Supply Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 0		150	mA
T <sub>RO</sub>	Output Rise Time			4	nS
N <sub>H</sub>	Fanout High-Level Output	V <sub>CC</sub> = max. V <sub>OH</sub> = 2.7V		20 TTL LOAD	
N <sub>L</sub>	Fanout Low-Level Output	V <sub>CC</sub> = max. V <sub>OL</sub> = 0.5V		10 TTL LOAD	

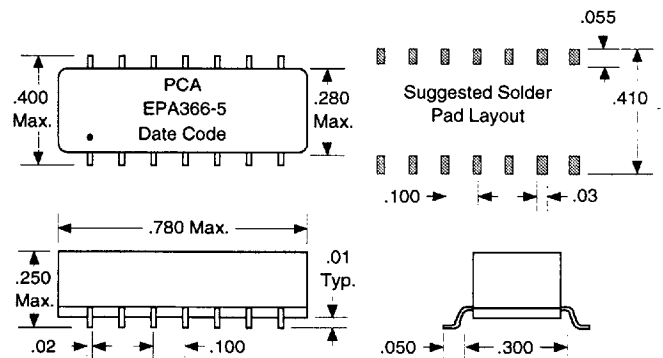
### Schematic



Recommended Operating Conditions				
	Parameter	Min	Max	Unit
V <sub>CC</sub>	Supply Voltage	4.75	5.25	V
V <sub>IH</sub>	High-Level Input Voltage	2.0		V
V <sub>IL</sub>	Low-Level Input Voltage		0.8	V
I <sub>IK</sub>	Input Clamp Current		-18	mA
I <sub>OH</sub>	High-Level Output Current		-1.0	mA
I <sub>OL</sub>	Low-Level Output Current		20	mA
PW*	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T <sub>A</sub>	Operating Free-Air Temperature	0	+70	°C

\*These two values are inter-dependent.

### Package Dimensions



Input Pulse Test Conditions @ 25° C				Unit
E <sub>IN</sub>	Pulse Input Voltage		3.2	Volts
PW	Pulse Width % of Total Delay		110	%
T <sub>RI</sub>	Pulse Rise Time (0.75 - 2.4 Volts)		2.0	nS
P <sub>RR</sub>	Pulse Repetition Rate @ T <sub>d</sub> ≤ 200 nS		1.0	MHz
	Pulse Repetition Rate @ T <sub>d</sub> > 200 nS		100	KHz
V <sub>CC</sub>	Supply Voltage		5.0	Volts

DSA366 Rev. A 2/5/96

QAF-CSO1 Rev. B 8/25/94

Unless Otherwise Noted Dimensions in Inches

Tolerances:

Fractional = ± 1/32

16 .XX = ± .030 .XXX = ± .010



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