

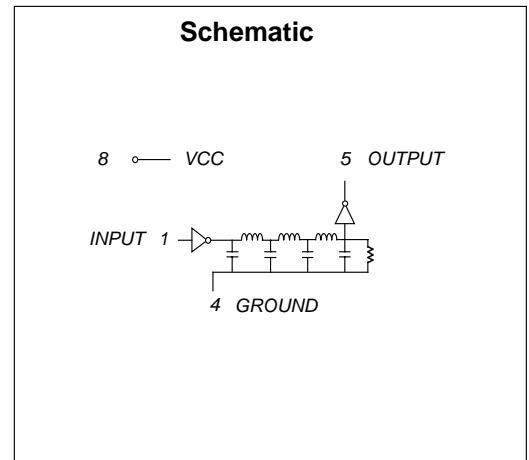
# 8 Pin DIP and SMD Single Output Low Power / Low Noise 3.3V Application TTL Compatible Active Delay Lines

Compatible with standard auto-insertable equipment and can be used in either infrared or vapor phase process.

TIME DELAY (ns) ± 5% or ± 2 nS†	PART NUMBER (DIP)	PART NUMBER (SMD)	TIME DELAY (ns) ± 5% or ± 2 nS†	PART NUMBER (DIP)	PART NUMBER (SMD)
5	EPA3856-5	EPA3856G-5	50	EPA3856-50	EPA3856G-50
7	EPA3856-7	EPA3856G-7	60	EPA3856-60	EPA3856G-60
10	EPA3856-10	EPA3856G-10	75	EPA3856-75	EPA3856G-75
12	EPA3856-12	EPA3856G-12	100	EPA3856-100	EPA3856G-100
15	EPA3856-15	EPA3856G-15	120	EPA3856-120	EPA3856G-120
20	EPA3856-20	EPA3856G-20	125	EPA3856-125	EPA3856G-125
25	EPA3856-25	EPA3856G-25	150	EPA3856-150	EPA3856G-150
30	EPA3856-30	EPA3856G-30	175	EPA3856-175	EPA3856G-175
35	EPA3856-35	EPA3856G-35	200	EPA3856-200	EPA3856G-200
40	EPA3856-40	EPA3856G-40	225	EPA3856-225	EPA3856G-225
45	EPA3856-45	EPA3856G-45	250	EPA3856-250	EPA3856G-250

† Whichever is greater. Delay Times referenced from input to leading edges at 25°C, 3.0V, with no load.

DC Electrical Characteristics					
Parameter	Test Conditions	Min	Max	Unit	
$V_{OH}$	High-Level Output Voltage	$V_{CC}=2.7$ to $3.6$ V; $I_{OH}=-100\mu A$	$V_{CC}-0.2$		V
		$V_{CC}=2.7$ V; $I_{OH}=-6$ mA	2.4		V
		$V_{CC}=3.0$ V; $I_{OH}=-20$ mA	2.0		V
$V_{OL}$	Low-Level Output Voltage	$V_{CC}=2.7$ V; $I_{OL}=-100\mu A$		0.2	V
		$V_{CC}=2.7$ V; $I_{OL}=24$ mA		0.5	V
		$V_{CC}=3.0$ V; $I_{OL}=32$ mA		0.5	V
$V_{IK}$	Input Clamp Voltage	$V_{CC}=2.7$ V; $I_{IK}=-18$ mA		-1.2	V
$I_{CCH}$	Quiescent Supply Current	$V_{CC}=3.6$ V; $O_H, V_I = Gnd$ or $V_{CC}, I_O=0$		TBA	mA
$I_{CCL}$	Quiescent Supply Current	$V_{CC}=3.6$ V; $O_L, V_I = Gnd$ or $V_{CC}, I_O=0$		TBA	mA



Recommended Operating Conditions				
		Min	Max	Unit
$V_{CC}$	Supply Voltage	2.7	3.6	V
$V_{IH}$	High-Level Input Voltage		2.0	V
$V_{IL}$	Low-Level Input Voltage		0.8	V
$I_{IK}$	Input Clamp Current		-20	mA
$I_{OH}$	High-Level Output Current		-20	mA
$I_{OL}$	Low-Level Output Current		32	mA
$PW^*$	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
$PW$	Pulse Width % of Total Delay	110	%
$TRI$	Pulse Rise Time (0.75 - 2.4 Volts)	2.0	nS
$PRR$	Pulse Repetition Rate @ $T_d \leq 200$ nS	1.0	MHz
	Pulse Repetition Rate @ $T_d > 200$ nS	100	KHz
$V_{CC}$	Supply Voltage	3.0	Volts

\*These two values are inter-dependent.

