

5 Tap High Speed CMOS (HCT) Compatible Active Delay Lines EP9604G-XX & EP9604G-XX-RC

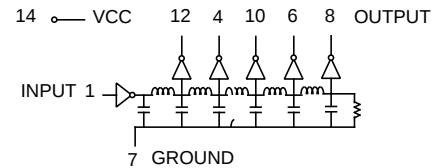
Add "-RC" after part number for RoHS Compliant

PCA Part Number	Tap Delays ($\pm 5\%$ or $\pm 2\text{nS}$)				Total Delay ($\pm 5\%$ or $\pm 2\text{nS}$)	PCA Part Number	Tap Delays ($\pm 5\%$ or $\pm 2\text{nS}$)				Total Delay ($\pm 5\%$ or $\pm 2\text{nS}$)
EP9604G-32(-RC)	12*	17	22	27	32	EP9604G-400(-RC)	80	160	240	320	400
EP9604G-36(-RC)	12*	18	24	30	36	EP9604G-420(-RC)	84	168	252	336	420
EP9604G-40(-RC)	12*	19	26	33	40	EP9604G-440(-RC)	88	176	264	352	440
EP9604G-44(-RC)	12*	20	28	36	44	EP9604G-450(-RC)	90	180	270	360	450
EP9604G-48(-RC)	12*	21	30	39	48	EP9604G-500(-RC)	100	200	300	400	500
EP9604G-52(-RC)	12*	22	32	42	52	EP9604G-550(-RC)	110	220	330	440	550
EP9604G-60(-RC)	12*	24	36	48	60	EP9604G-600(-RC)	120	240	360	480	600
EP9604G-75(-RC)	15	30	45	60	75	EP9604G-650(-RC)	130	260	390	520	650
EP9604G-100(-RC)	20	40	60	80	100	EP9604G-700(-RC)	140	280	420	560	700
EP9604G-125(-RC)	25	50	75	100	125	EP9604G-750(-RC)	150	300	450	600	750
EP9604G-150(-RC)	30	60	90	120	150	EP9604G-800(-RC)	160	320	480	640	800
EP9604G-175(-RC)	35	70	105	140	175	EP9604G-850(-RC)	170	340	510	680	850
EP9604G-200(-RC)	40	80	120	160	200	EP9604G-900(-RC)	180	360	540	720	900
EP9604G-250(-RC)	50	100	150	200	250	EP9604G-950(-RC)	190	380	570	760	950
EP9604G-300(-RC)	60	120	180	240	300	EP9604G-1000(-RC)	200	400	600	800	1000
EP9604G-350(-RC)	70	140	210	280	350						

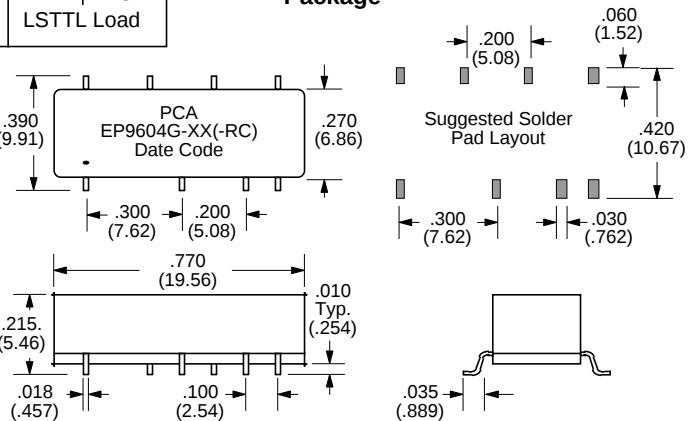
†Whichever is greater. *Inherent Delay • Delay times referenced from input to leading edges at 25°C, 5.0V.

DC Electrical Characteristics		Test Conditions	Min.	Max.	Unit
V_{IH}	High Level Input Voltage	$V_{CC} = 4.5$ to 5.5	2.0		Volt
V_{IL}	Low Level Input Voltage	$V_{CC} = 4.5$ to 5.5		0.8	Volt
V_{OH}	High Level Output Voltage	$V_{CC} = 4.5\text{V}$, $I_O = -4.0\text{mA}$ @ V_{IH} or V_{IL}	4.0		Volt
V_{OL}	Low Level Output Voltage	$V_{CC} = 4.5\text{V}$, $I_O = 4.0\text{mA}$ @ V_{IH} or V_{IL}		0.3	Volt
I_L	Input Leakage Current	$V_{CC} = 5.5\text{V}$ @ V_{IH} or V_{IL}		± 1.0	μA
I_{CCL}	Supply Current	$V_{CC} = 5.5\text{V}$, $V_{IN} = 0$		15	mA
T_{RO}	Output Rise Time	$\leq 550\text{ nS}$ (.75 - 2.4 Volts) $> 550\text{ nS}$		4	nS
N_H	High Fanout	$V_{CC} = 5.5\text{V}$, $V_{OH} = 4.0\text{V}$	10		LSTTL Load

Schematic



Package



Recommended Operating Conditions		Min.	Max.	Unit
V_{CC}	DC Supply Voltage	4.5	5.5	Volt
V_I	DC Input Voltage Range	0	V_{CC}	Volt
V_O	DC Output Voltage Range	0	V_{CC}	Volt
I_O	DC Output Source/Sink Current		25	mA
PW^*	Pulse Width % of Total Delay	40		%
D^*	Duty Cycle		40	%
T_A	Operating Free Air Temperature	-40	+85	°C

*These two values are inter-dependent.

Input Pulse Test Conditions @ 25° C		Unit	
E_{IN}	Pulse Input Voltage	3.2	Volts
PW	Pulse Width % of Total Delay	150	%
T_{RI}	Pulse Rise Time (0.75 - 2.4 Volts)	2.0	nS
PRR	Pulse Repetition Rate @ $T_d \leq 500\text{ nS}$	1.0	MHz
	Pulse Repetition Rate @ $T_d > 500\text{ nS}$	100	KHz
V_{CC}	Supply Voltage	5.0	Volts

Notes :		EP9604G-XX	EP9604G-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)	28 pieces/tube	28 pieces/tube
	(Tape & Reel)	TBD pieces/13" reel (*EP9604G-XX-TR)	TBD pieces/13" reel (*EP9604G-XX-RCTR)

Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$