



Switching Characteristics Over the Operating Range¹²⁾

Parameter	Description	Test Load	FCT827AT				FCT827BT				Unit	Fig. No. ¹³⁾
			Military		Commercial		Military		Commercial			
			Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
t_{PLH} t_{PHL}	Propagation Delay D to Y	$C_L = 50 \text{ pF}$ $R_L = 500\Omega$	1.5	9.0	1.5	8.0	1.5	6.5	1.5	5.0	ns	1, 3
t_{PLH} t_{PHL}	Propagation Delay D to Y ¹⁶⁾	$C_L = 300 \text{ pF}$ $R_L = 500\Omega$	1.5	17.0	1.5	15.0	1.5	14.0	1.5	13.0	ns	1, 3
t_{PZH} t_{PZL}	Output Enable Time OE to Y	$C_L = 50 \text{ pF}$ $R_L = 500\Omega$	1.5	13.0	1.5	12.0	1.5	9.0	1.5	8.0	ns	1, 7, 8
t_{PZH} t_{PZL}	Output Enable Time OE to Y ¹⁶⁾	$C_L = 300 \text{ pF}$ $R_L = 500\Omega$	1.5	25.0	1.5	23.0	1.5	16.0	1.5	15.0	ns	1, 7, 8
t_{PHZ} t_{PHL}	Output Disable Time OE to Y ¹⁶⁾	$C_L = 5 \text{ pF}$ $R_L = 500\Omega$	1.5	9.0	1.5	9.0	1.5	7.0	1.5	6.0	ns	1, 7, 8
t_{PHZ} t_{PHL}	Output Disable Time OE to Y	$C_L = 50 \text{ pF}$ $R_L = 500\Omega$	1.5	10.0	1.5	10.0	1.5	8.0	1.5	7.0	ns	1, 7, 8

Parameter	Description	Test Load	FCT827CT				Unit	Fig. No. ¹³⁾
			Military		Commercial			
			Min.	Max.	Min.	Max.		
t_{PLH} t_{PHL}	Propagation Delay D to Y	$C_L = 50 \text{ pF}$ $R_L = 500\Omega$	1.5	5.0	1.5	4.4	ns	1, 3
t_{PLH} t_{PHL}	Propagation Delay D to Y ¹⁶⁾	$C_L = 300 \text{ pF}$ $R_L = 500\Omega$	1.5	11.0	1.5	10.0	ns	1, 3
t_{PZH} t_{PZL}	Output Enable Time OE to Y	$C_L = 50 \text{ pF}$ $R_L = 500\Omega$	1.5	8.0	1.5	7.0	ns	1, 7, 8
t_{PZH} t_{PZL}	Output Enable Time OE to Y ¹⁶⁾	$C_L = 300 \text{ pF}$ $R_L = 500\Omega$	1.5	15.0	1.5	14.0	ns	1, 7, 8
t_{PHZ} t_{PHL}	Output Disable Time OE to Y ¹⁶⁾	$C_L = 5 \text{ pF}$ $R_L = 500\Omega$	1.5	6.7	1.5	5.7	ns	1, 7, 8
t_{PHZ} t_{PHL}	Output Disable Time OE to Y	$C_L = 50 \text{ pF}$ $R_L = 500\Omega$	1.5	7.0	1.5	6.0	ns	1, 7, 8

Notes:
 12. Minimum limits are guaranteed but not tested on Propagation Delays.
 13. See "Parameter Measurement Information" in the General Information Section.



Ordering Information

Speed (ns)	Ordering Code	Package Name	Package Type	Operating Range
4.4	CY74FCT827CTPC	P13/13A	24-Lead (300-Mil) Molded DIP	Commercial
	CY74FCT827CTQC	Q13	24-Lead (150-Mil) QSOP	
	CY74FCT827CTSOC	S13	24-Lead (300-Mil) Molded SOIC	
5.0	CY74FCT827BTPC	P13/13A	24-Lead (300-Mil) Molded DIP	Commercial
	CY74FCT827BTQC	Q13	24-Lead (150-Mil) QSOP	
	CY74FCT827BTSOC	S13	24-Lead (300-Mil) Molded SOIC	
5.0	CY54FCT827CTDDB	D14	24-Lead (300-Mil) CerDIP	Military
	CY54FCT827CTLMB	L64	28-Square Leadless Chip Carrier	
6.5	CY54FCT827BTDDB	D14	24-Lead (300-Mil) CerDIP	Military
	CY54FCT827BTLMB	L64	28-Square Leadless Chip Carrier	
8.0	CY74FCT827ATPC	P13/13A	24-Lead (300-Mil) Molded DIP	Commercial
	CY74FCT827ATQC	Q13	24-Lead (150-Mil) QSOP	
	CY74FCT827ATSOC	S13	24-Lead (300-Mil) Molded SOIC	
9.0	CY54FCT827ATDDB	D14	24-Lead (300-Mil) CerDIP	Military
	CY54FCT827ATLMB	L64	28-Square Leadless Chip Carrier	

Document #: 38-00261-A