Dual H-Driver For Instrumentation

Electrical Characteristics: $T_A = 25^oC$, $V_{CC} = 16V$, except as noted

Type	Characteristic	Symbol	Limits			Units
			Minimum	Typical	Maximum	
CA3275	Operating Supply Voltage Range	V_{CC}	8	-	16	V
	Supply Current, Note 1	I_{CC}	-	8	20	mA
	Input Levels:					
	Logic Input, Low Voltage	V_{IL}	-	-	0.8	V
	Logic Input, High Voltage	V_{IH}	3.5	-	-	
	Logic Input, Low Current, $V_{IH} = 0V$	I_{IL}	-10	-	-	µA
	Logic Input, High Current, $V_{IH} = 5V$	I_{IH}	-	-	10	
	Output: RLA = RLB = 138Ω					
	Maximum Source Saturated Voltage	V_{SAT} - High	-	1.2	1.75	V
	Maximum Sink Saturated Voltage	V_{SAT} - Low	-	0.25	0.5	
	Diff. V_{SAT} Voltage, Both Outputs Saturated	Diff - V_{SAT}	-	10	100	mV
	Propagation Delay: $T_A = 25^oC$					
	Source Current					
	Turn-Off Delay	t_{sc-off}	-	-	2	µs
	Fall Time	t_{sc-f}	-	-	2.2	
	Turn-On Time	t_{sc-on}	-	-	1	
	Rise Time	t_{sc-r}	-	-	0.4	
	Sink Current					
	Turn-Off Delay	t_{sk-off}	-	-	1.6	
	Fall Time	t_{sk-f}	-	-	0.4	
	Turn-On Delay	t_{sk-on}	-	-	0.6	
	Rise Time	t_{sk-r}	-	-	0.2	

Note 1: No load, PWMA = PWMB = 5V, DIRA = DIRB = 0V.

Voltage Regulator With Reverse Battery Protection

Functional Operating Ranges at $T_A = 25^oC$, V_{IN} = 5.7 to 16 Volts V_{CC1} & V_{CC2} Filter Capacitors = 3.3µF, C_{RST} = 0.47µF, unless otherwise specified.

Type	Characteristic	Symbol	Limits		Units
			Minimum	Maximum	
CA3276	Standby Regulator:				
	Output Voltage	V_{CC1}	4.75	5.25	V
	Output Current	I_{CC1}	-	50	mA
	Dropout Voltage:				
	$V_{IN} = 4.75V$, $I_{CC1} = 50mA$	$V_{IN} - V_{CC1}$		0.6	V
	Output Clamp	V_{CP1}	-	6	V
	Power Supply Rejection Ratio	P_{SSR}	-48	-	dB
	Enable Input High	V_{IH}	3.5	$V_{CC} - 0.5$	V
	Enable Input Low	V_{IL}	-0.5	0.9	V
	Enable Regulator:				
	Output Voltage	V_{CC2}	4.75	5.25	V
	Output Current	I_{CC2}	-	100	mA
	Enable Input High	V_{IH}	3.5	$V_{CC} - 0.5$	V
	Enable Input Low	V_{IL}	-0.5	0.9	V
	Output Clamp	V_{CP2}	-	6	V
	I_{SK} Saturation Voltage: $I_{SK} = 100mA$	V_{SAT}	-	0.5	V
	Low Voltage Reset (V_{ARY} V_{IN})	V_{IN}	4	4.5	V
	Reset Output Low: RST = 300Ω to 5V, $V_{IN} = 4V$	V_{RST}	-	0.8	V
	Reset Delay Time:				
	($C_{rst} = 0.47µF$; $V_{IN} = 10V$ step turn-on meas. V_{CC1})	T_{RST}	100	200	ms