Electronic Switching Circuit For Ignition Applications

Electrical Characteristics at T_A = 25°C, V = 13V

Type	Characteristics	Test Period	Limits						Operating Temp. Range (°C)	Units	Package†
			CA3165E1			CA3165E					
			Min.	Typ.	Max.	Min.	Typ.	Max.			
CA3165	Input Current at Term*	Dwell Spark	– –	18.4 17.5	– –	– –	18.4 17.5	– –	-40 to +85	mA	8E, 14E
	Output Voltage at Term 4 V_4	Dwell Spark	12.8 –	– –	– 0.5	12.8 –	– –	– 0.5		V	
	Output Voltage at Term 7 V_7	Dwell	–	–	1	–	–	–		V	
	Output Voltage at Term 8 V_8	Dwell Portion of Spark	– 1.2	– –	0.9 –	–	–	–		V	
	Oscillator Voltage at Term 2 V_2	Dwell Spark	– –	4.4 0.6	– –	– –	4.4 0.6	– –		V_{P-P}	

* CA3165E Term 7 I_7
CA3161E1 Term 12 I_{12}
† See interpretation guide and packaging section

Speed-Control System

Type	Typical Switching Characteristics					Operating Temp. Range (°C)	Package†
CA3228	Driver Command Input Hold Times: (Based on 0.68 µF capacitor on Pin 4)					-40 to +85	24E
	Acceleration (ms)	Coast (ms)	Resume (ms)	On (ms)	Off (ms)		
	50	50	330	50	50		
	Internal Oscillator Frequency, f_{OSC} = 10 kHz (Based on 0.001 µF capacitor on Pin 5)						
	Typical Performance Characteristics						
	(f_{OSC} = 50 kHz; fs/Speed Ratio, 2.22 Hz/mph)						
	Speed Sensor Input Frequency Range (fs) at Pin 8 (Hz)	Speed Resolution (mph)	Minimum Operating Speed (mph)	Maximum Stored Speed (mph)	Redundant Brake Speed (mph)		
	62 to 222	0.45	25	100	11		

† See interpretation guide and packaging section