

# CD5026 PWM Controller

CYT  
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## General Description

The CD5026 PWM controller contains all of the features necessary to implement power converters utilizing the active clamp and reset technique with current-mode control. With the active clamp technique, higher efficiencies and greater power densities can be realized compared to conventional catch winding or RDC clamp and reset techniques. The CD5026 provides two control outputs are provided, the main power switch control (OUT\_A) and the active clamp switch control (OUT\_B). The device can be configured to control either a P-Channel or N-Channel clamp switch. The main gate driver features a compound configuration, consisting of both MOS and Bipolar devices, providing superior gate drive characteristics.

The CD5026 can operate at a bias voltage of up to 100V, and the highest working frequency can reach 1MHz. Additional features include programmable maximum duty cycle, line undervoltage lockout, cycle-by-cycle current limit, over-current hiccup protection and adjustable delay protection time, slope compensation, soft-start, synchronization input and output capability, precision reference, and thermal shutdown.

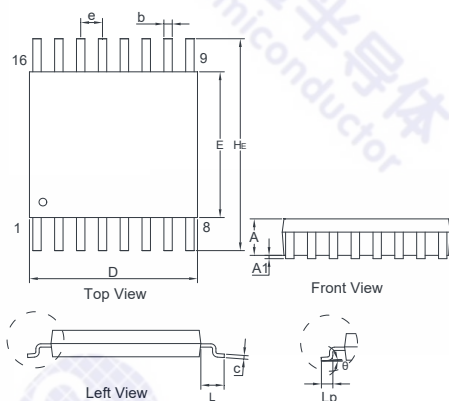
## Absolute Maximum Ratings

VIN to GND	-0.3V to 105V
VCC to GND	-0.3V to 16V
CS to GND	-0.3V to 1V
COMP input current All other pins to GND Junction	0mA ~ 10mA -0.3V to 7V
temperature Storage	150°C
temperature	-65°C to 150°C

## Recommended Operating Conditions

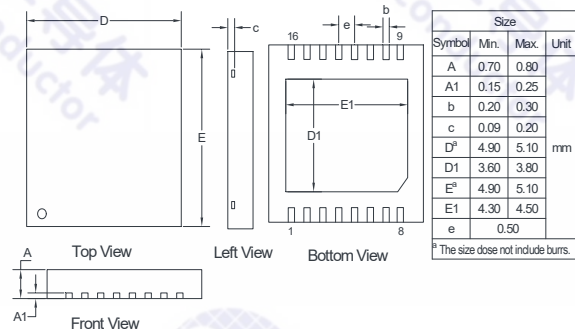
VIN voltage	13V to 100V
VCC voltage	8V to 15V
Operating junction temperature (T <sub>J</sub> )	-40°C to 125°C

## Package Diagram



Size			
Symbol	Min.	Max.	Unit
A	--	1.20	mm
A1	0.05	0.15	
b	0.19	0.30	
c	0.09	0.20	
D <sup>a</sup>	4.90	5.10	
E <sup>a</sup>	4.30	4.50	
e	0.65		
E <sub>2</sub>	6.20	6.60	
L <sub>p</sub>	0.40	0.70	
L	0.95		
θ	0	8	

<sup>a</sup> The size does not include burrs.



Size			
Symbol	Min.	Max.	Unit
A	0.70	0.80	mm
A1	0.15	0.25	
b	0.20	0.30	
c	0.09	0.20	
D <sup>a</sup>	4.90	5.10	
D1	3.60	3.80	
E <sup>a</sup>	4.90	5.10	
E1	4.30	4.50	
e	0.50		

<sup>a</sup> The size does not include burrs.

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## Typical Application

