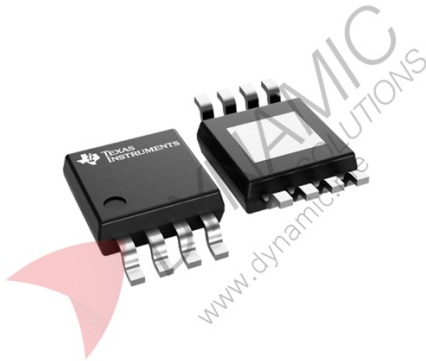


TPS2069DGN Current-Limited Power Switch IC

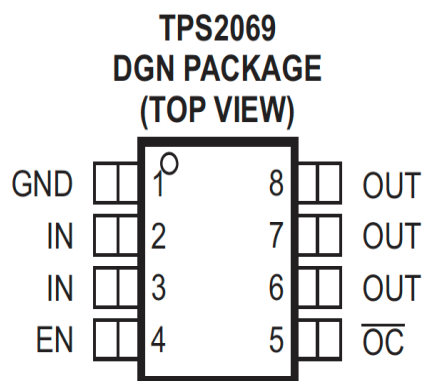


Features:

The TPS2069DGN is a current limited power distribution switch integrating a 70 mOhm N channel high side MOSFET for 2.7V to 5.5V systems. It provides 1.5A continuous load current with accurate internal current limiting from 1.6A minimum to 2.6A maximum. An internal charge pump controls rise and fall times to reduce inrush current and switching surges. The device features thermal shutdown with automatic recovery, undervoltage lockout, reverse current blocking and a deglitched open drain overcurrent output that asserts low during fault conditions. It is optimized for heavy capacitive loads and short circuit environments such as USB hubs and protected power rails.

Specifications	
Operating Voltage Range	2.7V to 5.5V
Continuous Output Current	1.5A
Current Limit Threshold	1.6A min to 2.6A max
On State Resistance	70mOhm typ
Typical Rise Time	0.6ms
Standby Supply Current	1uA max
Overcurrent Output	Open drain, active low
Undervoltage Lockout	Approximately 2V
Thermal Shutdown	Approximately 135C with hysteresis
Reverse Current Blocking	Supported
Operating Temperature Range	-40C to 85C
Package	DGN 8 Pin
Usage	USB power distribution, heavy capacitive load switching, short circuit protected 5V rails

Pinouts:



Pin Name	Type	Description
GND	Power	Ground
IN	Input	Input voltage supply
IN	Input	Input voltage supply
EN	Input	Enable input, logic high turns on power switch
OC	Output	Overcurrent output, open drain, active low
OUT	Output	Power switch output
OUT	Output	Power switch output
OUT	Output	Power switch output