



General Description

The MIC2026 and MIC2076 are high-side MOSFET switches optimized for general-purpose power distribution requiring circuit protection.

The MIC2026/76 are internally current limited and have thermal shutdown that protects the device and load.

The MIC2076 offers "smart" thermal shutdown that reduces current consumption in fault modes. When a thermal shutdown fault occurs, the output is latched off until the faulty load is removed. Removing the load or toggling the enable input will reset the device output.

Both devices employ soft-start circuitry that minimizes inrush current in applications where highly capacitive loads are employed.

A fault status output flag is asserted during overcurrent and thermal shutdown conditions. Transient faults are internally filtered.

The MIC2026/76 are available in 8-pin DIP or 8-pin SOIC.

All support documentation can be found on Micrel's web site at www.micrel.com.

Features

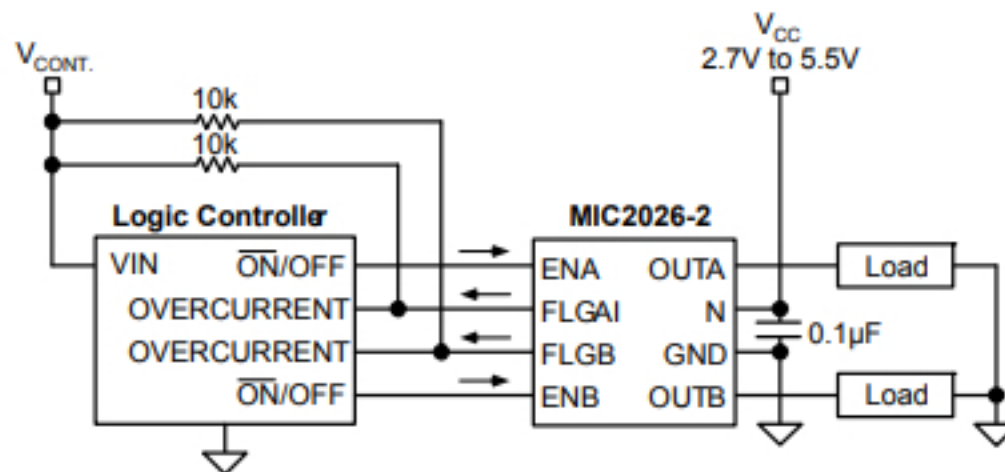
- 140mΩ maximum on-resistance per channel
- 2.7V to 5.5V operating range
- 500mA minimum continuous current per channel
- Shortcircuit protection with thermal shutdown
- Thermally isolated channels
- Fault status flag with 3ms filter eliminates false assertions
- Undervoltage lockout
- Reverse current flow blocking (no "body diode")
- Circuit breaker mode (MIC2076)
- Logic-compatible inputs
- Soft-start circuit
- Low quiescent current
- Pin compatible with MIC2526
- UL File # E179633

Applications

- USB peripherals
- General purpose power switching
- ACPI power distribution
- Notebook PCs
- PDAs
- PC card hot swap

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Typical Application



UL Recognized Component

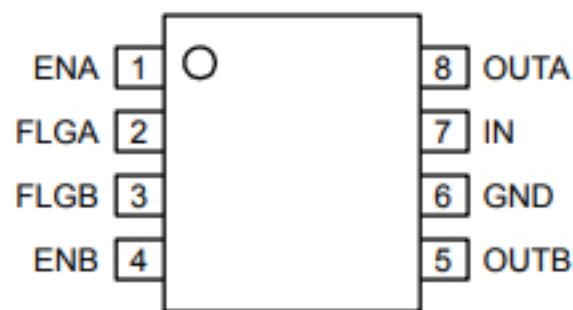
Ordering Information

Part Number		Enable	Temperature Range	Package
Standard	Pb-Free			
MIC2026-1BM	MIC2026-1YM ⁽¹⁾	Active High	-40°C to +85°C	8-Pin SOIC
MIC2026-2BM	MIC2026-2YM ⁽¹⁾	Active Low		8- Pin SOIC
MIC2026-1BN	—	Active High		8- Pin DIP
MIC2026-2BN	—	Active Low		8- Pin DIP
MIC2076-1BM	MIC2076-1YM ⁽¹⁾	Active High		8- Pin SOIC
MIC2076-2BM	MIC2076-2YM ⁽¹⁾	Active Low		8- Pin SOIC
MIC2076-1BN	—	Active High		8-Pin DIP
MIC2076-2BN	—	Active Low		8-Pin DIP

Note:

1. RoHS compliant and Halogen free.

Pin Configuration



8-Pin SOIC (M)
8-Pin DIP (N)

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Pin Description

Pin Number	Pin Name	Pin Function
1	ENA	Switch A Enable (Input): Logic-compatible, enable input. Active high (-1) or active low (-2).
2	FLGA	Fault Flag A (Output): Active-low, open-drain output. Indicates overcurrent or thermal shutdown conditions. Overcurrent conditions must last longer than t_D in order to assert FLGA.
3	FLGB	Fault Flag B (Output): Active-low, open-drain output. Low indicates overcurrent or thermal shutdown conditions. Overcurrent conditions must last longer than t_D in order to assert FLGB.
4	ENB	Switch B Enable (Input): Logic-compatible enable input. Active-high (-1) or active-low (-2).
5	OUTB	Switch B (Output)
6	GND	Ground
7	IN	Input: Switch and logic supply input.
8	OUTA	Switch A (Output)