

BM3051 Series

2~5 Cells Secondary Protection IC, CMOS output, dynamic "H"

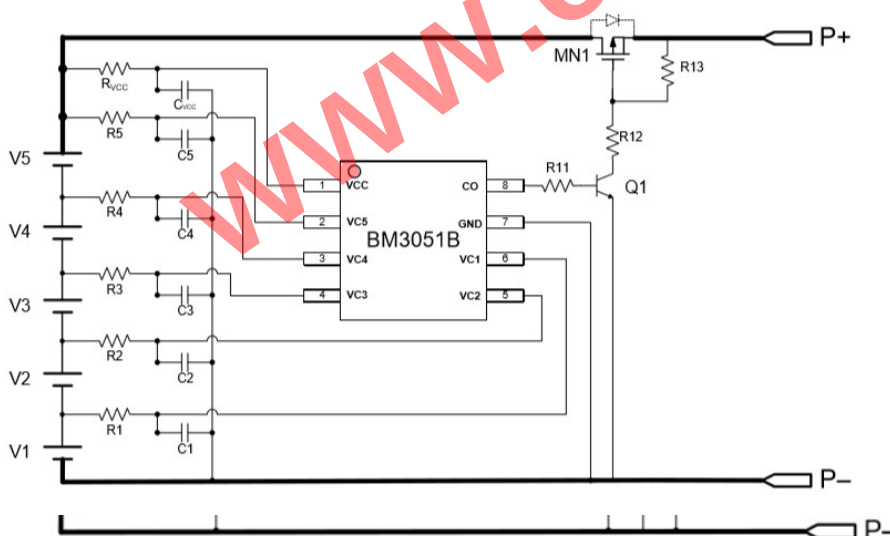


BM3051 series of products is a high-precision, high integration, Low-power rechargeable battery Two-level protection chip. The battery pack is provided with overcharge protection by detecting the voltage of each power-saving core in the battery pack. When any energy-saving core voltage reaches the overcharge threshold, the chip after overcharge protection delay TOVP, make the CO output into a high level, control the MOS tube open, will fuse fused. Single chip can protect the 2~5 battery, also can be multiple chip cascade use, protect 6 sections and more than 6 cell packs.

Features

- **High-accuracy voltage detection:**
 - Overcharge threshold 3.6 V ~ 4.6 V Accuracy: ± 25 mV (+25°C)
 ± 30 mV (-5°C~55°C)
- **overcharge hysteresis:**
 - 50mV; 100mV; 200mV; 360mV selectable
- **Delay time input selectable:**
 - 1s~4s, 1s step
- **CO output mode:**
 - CMOS output, dynamic "H"
- **Wide operation voltage: 5~25V**
- **Wide operation temperature range: -40°C ~85°C;**
- **Low power consumption**
 - Operation mode 2.0 uA (+25°C)
 - Sleeping mode 1.5 uA (+25°C)
- **Pb free (Sn 100%), halogen free**
- **Package**
 - MSOP8
 - DFN-8L

Typical application circuit



Applications:

- ✓ Power tool
- ✓ Noteboo
- ✓ UPS backup battery
- ✓ Vacuum cleaner



Type/Item	Overcharge Protection Voltage V_{OVP}	Overcharge hysteresis Voltage V_{HYS}	Overcharge protection delay time T_{OVP}	Package
BM3051JBA-M8A	4.225V	0.100V	1s	MSOP8
BM3051KBA-M8A	4.250V	0.100V	1s	MSOP8
BM3051NCB-M8A	4.300V	0.200V	2s	MSOP8
BM3051NDD-M8A	4.300V	0.360V	4s	MSOP8
BM3051OCD-M8A	4.350V	0.200V	4s	MSOP8
BM3051TDD-M8A	4.500V	0.360V	4s	MSOP8
BM3051HBA-M8A	4.200V	0.100V	1s	MSOP8
BM3051NDA-M8A	4.300V	0.360V	1s	MSOP8
BM3051SDC-D8A	4.450V	0.360V	3s	DFN-8L
BM3051RDD-D8A	4.425V	0.360V	4s	DFN-8L
BM3051LAB-D8A	4.275V	0.050V	2s	DFN-8L
BM3051JBA-D8A	4.225V	0.100V	1s	DFN-8L
BM3051KBA-D8A	4.250V	0.100V	1s	DFN-8L
BM3051OCB-D8A	4.350V	0.200V	2s	DFN-8L
BM3051OCD-D8A	4.350V	0.200V	4s	DFN-8L
BM3051NBA-D8A	4.300V	0.100V	1s	DFN-8L
BM3051IBA-D8A	4.175V	0.100V	1s	DFN-8L
BM3051NCB-D8A	4.300V	0.200V	2s	DFN-8L
BM3051HAA-D8A	4.200V	0.050V	1s	DFN-8L
BM3051NDD-D8A	4.300V	0.360V	4s	DFN-8L
BM3051TDD-D8A	4.500V	0.360V	4s	DFN-8L