

# MM3416

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## Overview

This IC is a 200mA Low dropout regulator IC with Rush current protection circuit. No load input current is 42 $\mu$ A typ. and it reduce drop voltage for high speed response. Rush current protection circuit can control rush current.

## Application

- Audio visual equipment
- Photographing / Imaging device
- Office equipment / Printer
- Home appliance equipment

## Features

Fast transient response, Rush current prevention

## Main specifications

|   |      |
|---|------|
| Output current<br>[mA]                          | 200  |
| Absolute maximum<br>rating<br>[V]               | 6.5  |
| Recommended<br>operating voltage<br>Min.<br>[V] | 1.70 |
| Recommended<br>operating voltage<br>Max.        | 5.5  |

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|  |                                |
|--|--------------------------------|
| [V]  |                                |
| Output voltage<br>Min.<br>[V]                    | 1.00                           |
| Output voltage<br>Max.<br>[V]                    | 5.00                           |
| Output voltage accuracy<br>[%]                   | ±1.0                           |
| No-Load Input Current<br>[μA]                    | 42.0                           |
| Dropout Voltage<br>[V]                           | 0.30                           |
| PSRR<br>[dB]                                     | 75                             |
| Output capacitor<br>[μF]                         | 0.47                           |
| Circuit structure                                | 1ch LDO                        |
| Operating ambient temperature<br>Min.<br>[deg.C] | -40                            |
| Operating ambient temperature<br>Max.<br>[deg.C] | 85                             |
| OFF input current<br>Typ.<br>[μA]                | 0.10                           |
| Output noise voltage<br>Typ.<br>[μVrms]          | 60                             |
| Protection function                              | OCP, Rush current protection   |
| Additional function                              | ON/OFF control, Auto discharge |

## Package

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SC-82ABB

SOT-25A

## Case Studies



**No amplifier or software design required. Development of an LDO for automobiles with open load/short circuit detection function. [Power Supply IC]**