

# 1000mA regulator IC

## MM1877 Series

### Outline

This IC is 1000mA maximum output current regulator IC. Output voltage accuracy  $\pm 2\%$ , dropout voltage 0.25V typ. ( $I_o = 500\text{mA}$ ) with the characteristics of a small regulator. The output noise reduction pin and the output ON / OFF control pin has. This regulator is ideal for stationary equipment to reduce standby power consumption.

### Applications

- (1) Flat TVs
- (2) DVD/Blu-ray players
- (3) DVD/Blu-ray recorders
- (4) Portable games

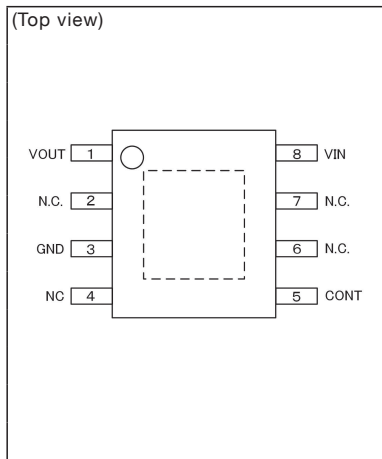
### Features

(Unless otherwise specified,  $T_a = +25^\circ\text{C}$ )

- (1) Input voltage range .....  $V_o(\text{Typ.}) + 0.7 \sim 14$
- (2) Output voltage range ..... 1.5~5.0V
- (3) Output voltage accuracy .....  $V_{\text{OUT}} \pm 2\%$
- (4) Maximum output current ..... 1000mA
- (5) Current Consumption ..... 2mA typ. (No-Load Input Current)
- (6) Output capacitor ..... 1 $\mu\text{F}$
- (7) Dropout voltage ..... 0.25V typ. ( $I_o = 500\text{mA}$ )
- (8) Line regulation ..... 0.05%/V typ.
- (9) Load regulation ..... 20mV typ. ( $I_o = 1\text{mA} \sim 1000\text{mA}$ )
- (10) Ripple rejection ..... 70dB typ. ( $f = 1\text{kHz}$ )

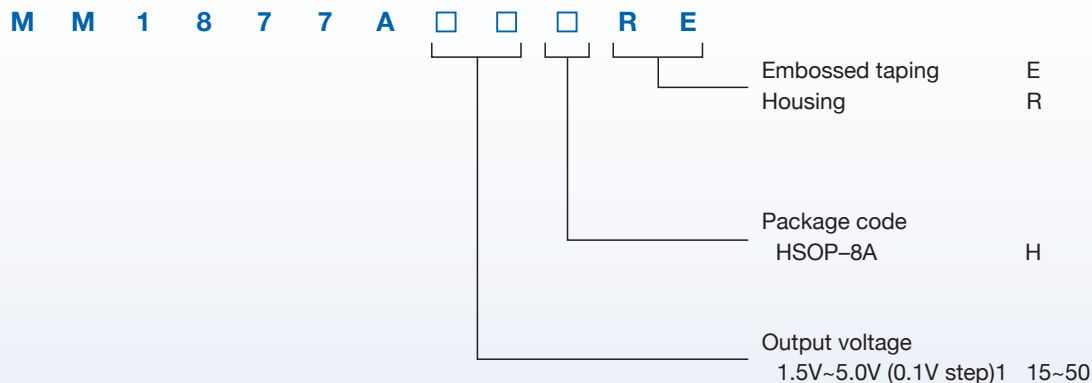
### Pin assignment

#### HSOP-8A



| Pin no. | HSOP-8A |
|---------|---------|
| 1       | VOUT    |
| 2       | N.C.    |
| 3       | GND     |
| 4       | N.C.    |
| 5       | CONT    |
| 6       | N.C.    |
| 7       | N.C.    |
| 8       | VIN     |

### Model name structure



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Selection guide

| Output Voltage | Accuracy | Parts No.                       | Dropout Voltage (Typ.)<br>Io=500mA | Output Current | No-Load Input Current (Typ.) |
|----------------|----------|---------------------------------|------------------------------------|----------------|------------------------------|
|                |          | HSOP-8A Package (2,000pcs/Reel) |                                    |                |                              |
| 1.5V           | ±2%      | MM1877A15HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 1.6V           | ±2%      | MM1877A16HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 1.7V           | ±2%      | MM1877A17HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 1.8V           | ±2%      | MM1877A18HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 1.9V           | ±2%      | MM1877A19HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 2.0V           | ±2%      | MM1877A20HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 2.1V           | ±2%      | MM1877A21HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 2.2V           | ±2%      | MM1877A22HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 2.3V           | ±2%      | MM1877A23HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 2.4V           | ±2%      | MM1877A24HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 2.5V           | ±2%      | MM1877A25HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 2.6V           | ±2%      | MM1877A26HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 2.7V           | ±2%      | MM1877A27HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 2.8V           | ±2%      | MM1877A28HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 2.9V           | ±2%      | MM1877A29HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 3.0V           | ±2%      | MM1877A30HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 3.1V           | ±2%      | MM1877A31HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 3.2V           | ±2%      | MM1877A32HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 3.3V           | ±2%      | MM1877A33HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 3.4V           | ±2%      | MM1877A34HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 3.5V           | ±2%      | MM1877A35HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 3.6V           | ±2%      | MM1877A36HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 3.7V           | ±2%      | MM1877A37HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 3.8V           | ±2%      | MM1877A38HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 3.9V           | ±2%      | MM1877A39HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 4.0V           | ±2%      | MM1877A40HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 4.1V           | ±2%      | MM1877A41HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 4.2V           | ±2%      | MM1877A42HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 4.3V           | ±2%      | MM1877A43HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 4.4V           | ±2%      | MM1877A44HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 4.5V           | ±2%      | MM1877A45HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 4.6V           | ±2%      | MM1877A46HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 4.7V           | ±2%      | MM1877A47HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 4.8V           | ±2%      | MM1877A48HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 4.9V           | ±2%      | MM1877A49HBE                    | 0.25V                              | 1000mA         | 2mA                          |
| 5.0V           | ±2%      | MM1877A50HBE                    | 0.25V                              | 1000mA         | 2mA                          |

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