

## 500mA Synchronous Step-Down DC/DC Converters ME3101 Series

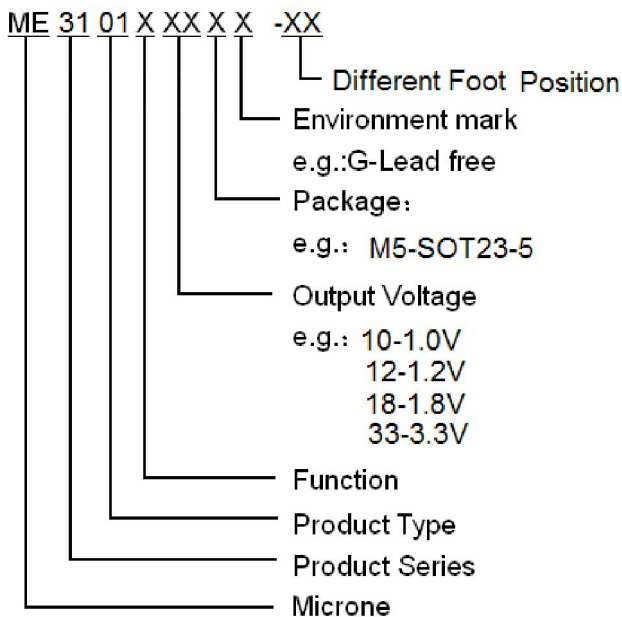
### General Description

ME3101 series is a group of synchronous rectification type DC/DC converters with a built-in 0.6 P-channel driver transistor and 0.7 N-channel switching transistor, designed to allow the use of ceramic capacitors. The ICs enable a high efficiency, stable power supply with an output current of 500mA to be configured using only a coil and two capacitors connected externally.

With the built-in oscillator, oscillation frequency is 1.2MHz. As for operation mode, the ME3101 series can be manually switched with automatic PWM/PFM switching control mode, allowing fast response, low ripple and high efficiency over the full range of load (from light load to high output current conditions).

During standby, all circuits are shutdown to reduce current consumption to as low as 1.0μA or less.

### Selection Guide



### Features

- | Synchronous Step-Down DC/DC
- | High Efficiency :93%(TYP)
- | Low Ripple Voltage :10mV
- | Output Current :500mA
- | Oscillation Frequency :1.2MHz
- | PWM/PFM Automatic Switching Control
- | Maximum Duty Ratio :100%
- | Ceramic Capacitor Compatible
- | Ultra Small Packages :SOT-23-5
- | Soft-start circuit built-in

### Typical Application

- | Mobile phones (PDC, GSM, CDMA, IMT200 etc.)
- | Bluetooth equipment
- | PDA
- | Portable communication modem
- | Portable games
- | Cameras
- | Digital cameras
- | Cordless phones
- | Notebook computers

### Typical Application Circuit

