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**ULTRA-SMALL PACKAGE PWM/PFM SWITCHING CONTROL**

**STEP-UP SWITCHING REGULATOR**

**General Description**

The ME2129 series is a CMOS step-up switching regulator which mainly consists of a reference voltage source, an oscillation circuit, an error amplifier, a phase compensation circuit, a PWM/PFM switching control circuit. Without the use of external low-ON-resistance Nch Power MOS, can be applied to need a high efficiency, high output current of the application circuit. The ME2129 series switches its operation to the PFM control circuit whose duty ratio is 15 % with to the PWM/PFM switching control circuit under a light load and to prevent decline in the efficiency by IC operation current.

**Features**

- Low voltage operation: Start-up is guaranteed from 0.9 V(IOUT =1 mA )
- Duty ratio: Built-in PWM/PFM switching control circuit 15 to 78 % .
- oscillator frequency: 300KHz
- External parts: coil, diode, capacitor, and transistor
- Output voltage range: <20V
- Output voltage accuracy:  $\pm 2\%$
- Soft start function: 2 ms

**Applications**

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

**Package**

- 5-pin SOT23-5