

150mA 10V INPUT LDO REGULATOR

NO.EA-245-131204

OUTLINE

The RP171x Series are CMOS-based LDO regulators featuring 150mA output current. Because of the 10V maximum input voltage, RP171x can be used in 2 cell lithium-ion battery powered portable appliances and besides a portable equipment. The supply current is Typ. 23 μ A though an excellent response characteristics.

The output voltage range from 1.2V is possible. The output voltage accuracy and temperature-drift coefficient of output voltage of the RP171x Series are excellent.

RP171x has a fold-back protection circuit and a thermal shutdown circuit. Moreover, a standby mode with ultra low supply current can be realized with the chip enable function.

SC-88A and SOT-23-5 with high power dissipation packages are available.

FEATURES

- Supply Current Typ. 23 μ A
- Standby Mode Typ. 0.1 μ A
- Dropout Voltage..... Typ. 0.20V ($I_{OUT}=100mA$, $V_{OUT}=3.0V$)
Typ. 0.40V ($I_{OUT}=150mA$, $V_{OUT}=2.8V$)
- Ripple Rejection Typ. 70dB ($f=1kHz$)
- Temperature-Drift Coefficient of Output Voltage Typ. $\pm 80ppm/^{\circ}C$
- Line Regulation Typ. 0.02%/V
- Output Voltage Accuracy $\pm 1.0\%$
- Packages..... SC-88A, SOT-23-5
- Input Voltage Range..... 2.6V to 10.0V
- Output Voltage Range 1.2V to 6.0V (0.1V steps)
(For other voltages, please refer to MARK INFORMATION.)
- Built-in Fold Back Protection Circuit..... Typ. 40mA (Current at short mode)
- Built-in Thermal Shutdown Circuit..... Shutdown Temperature at 165 $^{\circ}C$
- Ceramic capacitors are recommended to be used with this IC 1.0 μ F or more

APPLICATIONS

- Power source for portable communication equipment.
- Power source for electrical appliances such as cameras, VCRs and camcorders.
- Power source for battery-powered equipment.
- Power source for home appliances.