



Product Overview

MC78PC50: Linear Voltage Regulator, LDO, Low Noise, 150 mA

For complete documentation, see the data sheet

Product Description

The MC78PC00 are a series of CMOS LDO linear voltage regulators with high output voltage accuracy, low supply current, low dropout voltage, and high Ripple Rejection. Each of these linear voltage regulators consists of an internal voltage reference, an error amplifier, resistors, a current limiting circuit and a chip enable circuit.

The dynamic Response to line and load is fast, which makes these products ideally suited for use in hand-held communication equipment.

The MC78PC00 series of Low Dropout Linear Voltage Regulators are housed in the SOT-23 5 lead package, for maximum board space saving.

Features

- Ultra-Low Supply Current: typical 35 μA in ON mode with no load.
- Standby Mode: typical 0.1 μA .
- Low Dropout Voltage: typical 0.2 V @ $I_{\text{OUT}} = 100 \text{ mA}$.
- High Ripple Rejection: typical 70 dB @ $f = 1 \text{ kHz}$.
- Low Temperature-Drift Coefficient of Output Voltage: typical $\pm 100 \text{ ppm}/^\circ\text{C}$.
- Excellent Line Regulation: typical 0.05%/V.
- High Accuracy Output Voltage: $\pm 2.0\%$.
- Fast Dynamic Response to Line and Load.
- Small Package: SOT-23 5 leads.
- Built-in Chip Enable circuit (CE input pin).

Applications

- Power source for cellular phones (GSM, CDMA, TDMA), Cordless Phones (PHS, DECT) and 2-way radios.
- Power source for domestic appliances such as cameras, VCRs and camcorders.
- Power source for battery-powered equipment.

Part Electrical Specifications

Product	Compliance	Status	Output	Polarity	V_O (V)	I_O Typ (A)	V_I Max (V)	V_{DO} Typ (V)	I_q Typ (mA)	PSRR (dB)	Noise (μV_{rms})	Package Type
MC78PC50NTRG	Pb-free Halide free	Active	Single	Positive	5	0.15	9	0.17	0.035	70	30	SOT-23-5

For more information please contact your local sales support at www.onsemi.com

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