Product Overview

NCP786A: Linear Regulator with Adjustable Output Voltage, Ultra-Low I_q, High PSRR

For complete documentation, see the data sheet.

The NCP786A is high-performance linear regulator, offering a very wide operating input voltage range of up to 450 V DC, with an output current of up to 10 mA. Ideal for high input voltage applications such as industrial and home metering, home appliances.

The NCP786A family offers ±5% initial accuracy, extremely high-power supply rejection ratio and ultra-low quiescent current. The NCP786A family is optimized for high-voltage line and load transients, making them ideal for harsh environment applications. The output voltage can be set by resistor divider in range from 1.27 V up to 15 V. DFN6 5x6 Pb-free package with high allowable power dissipation keep small footprint at space sensitive applications.

Features

- 10 mA Guaranteed Output Current
- Wide Input Voltage Range, DC: Up to 450 V, AC: 85 V to 260 V
- Ultra Low Quiescent Current: Typ. 10 μA (VOUT 3/4 15 V)
- ±5% Accuracy Over Full Load, Line and Temperature Variations
- Thermal Shutdown and Current Limit Protection
- Ultra-high PSRR: 70 dB at 60 Hz, 90 dB at 100 kHz

Benefits

- Ideal for light load application
- Direct Convert from AC voltage to DC voltage
- Can minimize power consumption, High Power efficiency
- Stable operation @ full temperature range
- Can protection IC & Set from critical thermal explosion and damage
- Can generate noiseless clean output voltage

Applications

- Industrial Applications, Home Appliances
- Home Metering / Network Application
- Off−line Power Supplies

Part Electrical Specifications

Product	Compliance	Status	Output	Polarity	V_O (V)	I_O Typ (A)	V_I Min (V)	V_I Max (V)	V_{DO} Typ (V)	I_q Typ (mA)	PSRR (dB)	Noise (μV_{rms})	Enable	Power Good	Package Type
NCP786AMNADJTBG	Pb-free Halide free	NEW	Single	Positive	1.275	0.01	55	450	-	0.01	65	150	No	No	DFN-6

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

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