

Product Overview

NCP4687: Linear Voltage Regulator, LDO, High PSRR, 500 mA

For complete documentation, see the data sheet

Product Description

The NCP4687 is a CMOS 500 mA LDO linear voltage regulator with high output voltage accuracy which features a high ripple rejection, low supply current with low dropout and chip enable with built in low RDS(on)NMOS transistor for fast output capacitor discharging as option. The device is composed of the voltage reference unit, error amplifier, resistor divider for output voltage sensing or precise output voltage setting. The current limit and thermal shutdown makes the device very suitable for industrial applications and portable communication equipments.

Features

- $\pm 0.8\%$ Output Voltage Accuracy
- High PSRR of 75 dB
- Output noise of 40 μV_{rms}
- Fast output capacitor discharging option

Benefits

- Very accurate output for voltage sensitive products
- Very good noise tolerable device for noise sensitive application
- Very good for noise sensitive application.

Applications

- Home Appliances, Industrial Equipment
- DVBT and DVBS Receivers
- Car Audio Equipment, Navigation Systems
- Notebook Adaptors, LCD TVs, Cordless Phones and Private LAN Systems

Part Electrical Specifications

Product	Compliance	Status	Output	Polarity	V _O (V)	I _O Typ (A)	V _I Max (V)	V _{DO} Typ (V)	I _a Typ (mA)	PSRR (dB)	Noise (μV_{rms})	Package Type
NCP4687DH12T1G	Pb-free	Active	Single	Positive	1.2	0.5	6	0.35	0.075	75	40	SOT-89-5
NCP4687DH15T1G	Pb-free	Active	Single	Positive	1.5	0.5	6	0.31	0.075	75	40	SOT-89-5
NCP4687DH18T1G	Pb-free	Active	Single	Positive	1.8	0.5	6	0.27	0.075	75	40	SOT-89-5
NCP4687DH25T1G	Pb-free	Active	Single	Positive	2.5	0.5	6	0.23	0.075	75	40	SOT-89-5
NCP4687DH33T1G	Pb-free	Active	Single	Positive	3.3	0.5	6	0.22	0.075	75	40	SOT-89-5
NCP4687DMX18TCG	Pb-free	Active	Single	Positive	1.8	0.5	6	0.27	0.075	75	40	XDFN-6
NCP4687DMX25TCG	Pb-free	Active	Single	Positive	2.5	0.5	6	0.23	0.075	75	40	XDFN-6
NCP4687DMX33TCG	Pb-free	Active	Single	Positive	3.3	0.5	6	0.22	0.075	75	40	XDFN-6
NCP4687DSN18T1G	Pb-free	Active	Single	Positive	1.8	0.5	6	0.27	0.075	75	40	SOT-23-5
NCP4687DSN25T1G	Pb-free	Active	Single	Positive	2.5	0.5	6	0.23	0.075	75	40	SOT-23-5
NCP4687DSN28T1G	Pb-free	Active	Single	Positive	2.8	0.5	6	0.23	0.075	75	40	SOT-23-5

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

Created on: 7/11/2015