

Product Overview

NCP133: LDO Regulator, 500 mA, Ultra-Low Dropout, High PSRR, with Bias Rail

For complete documentation, see the data sheet.

NCP133 is a 500 mA VLDO equipped with NMOS pass transistor and a separate bias supply voltage (VBIAS). The device provides very stable, accurate output voltage with low noise suitable for space constrained, noise sensitive applications. In order to optimize performance for battery operated portable applications, the NCP133 features low IQ consumption. The XDFN6 1.2 mm x 1.2 mm package is optimized for use in space constrained applications.

Similar Products:

NCP13x Series
NCP130
NCP133
NCP134
NCP135
NCP137
NCP139

Output Current (A)

0.3
0.5
0.5
0.5
0.7
1

PSRR f=1 kHz (dB)

70
70
70
73
60
60

Dropout Voltage (V)

0.060
0.090
0.090
0.053
0.060
0.060

Features

- Ultra-Low Dropout of Typ. 140mV
- Fixed Output Voltage options from 0.8V to 2.1V and Adjustable
- 140 mV typical dropout at the full 500 mA load.
- Guaranteed Output Current from 0mA to 500mA
- 0.5% Typical Output Voltage Accuracy
- Output Current in Excess of 500mA
- Output Active Discharge option available

Applications

- Battery - powered and Portable Equipment

Benefits

- Allows to save power and operates with very low Vin-Vout voltage.
- Excellent choice for low voltage Vcore applications
- minimizes the power loss across the regulator
- Very good choice for high current applications
- Perfect fit for POL applications

End Products

- Smartphones, Tablets
- Cameras, DVRs, Camcorders

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 _g Typ (mA)	PSRR (dB)	Noise (μV _{rms})	Enable	Power Good	Package Type
NCP133AMX090TCG	Pb-free Halide free	Active	Single	Positive	0.9	0.5	0.8	5.5	0.14	0.08	80	40	Yes	No	XDFN-6
NCP133AMX100TCG	Pb-free Halide free	Active	Single	Positive	1	0.5	0.8	5.5	0.14	0.08	80	40	Yes	No	XDFN-6
NCP133AMX105TCG	Pb-free Halide free	Active	Single	Positive	1.05	0.5	0.8	5.5	0.14	0.08	80	40	Yes	No	XDFN-6
NCP133AMX110TCG	Pb-free Halide free	Active	Single	Positive	1.1	0.5	0.8	5.5	0.14	0.08	80	40	Yes	No	XDFN-6
NCP133AMX115TCG	Pb-free Halide free	Active	Single	Positive	1.15	0.5	0.8	5.5	0.14	0.08	80	40	Yes	No	XDFN-6
NCP133AMX120TCG	Pb-free Halide free	Active	Single	Positive	1.2	0.5	0.8	5.5	0.14	0.08	80	40	Yes	No	XDFN-6
NCP133AMX125TCG	Pb-free Halide free	Active	Single	Positive	1.25	0.5	0.8	5.5	0.14	0.08	80	40	Yes	No	XDFN-6
NCP133AMX130TCG	Pb-free Halide free	Active	Single	Positive	1.3	0.5	0.8	5.5	0.14	0.08	80	40	Yes	No	XDFN-6
NCP133AMX150TCG	Pb-free Halide free	Active	Single	Positive	1.5	0.5	0.8	5.5	0.14	0.08	80	40	Yes	No	XDFN-6
NCP133AMX180TCG	Pb-free Halide free	Active	Single	Positive	1.8	0.5	0.8	5.5	0.14	0.08	80	40	Yes	No	XDFN-6
NCP133AMXADJTCG	Pb-free Halide free	Active	Single	Positive	Adj	0.5	0.8	5.5	0.14	0.08	80	50	Yes	No	XDFN-6
NCP133BMXADJTCG	Pb-free Halide free	Active	Single	Positive	Adj	0.5	0.8	5.5	0.14	0.08	80	50	Yes	No	XDFN-6

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

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