



Product Overview

NCP120: Ultra-Low Dropout Voltage Regulator with Bias Rail, 150 mA

For complete documentation, see the data sheet

Product Description

NCP120 is a 150 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 NCP120 features low IQ consumption. The XDFN6 1.2 mm x 1.2 mm package is optimized for use in space constrained applications

Features	Benefits
<ul style="list-style-type: none">• Ultra-Low Dropout of Typ. 37mV• Fixed Output Voltage options from 0.8V to 2.1V• 37 mV typical dropout at the full 150 mA load.• Guaranteed Output Current from 0mA to 150mA• 0.5% Typical Output Voltage Accuracy• Output Current in Excess of 150mA• Output Active Discharge option available	<ul style="list-style-type: none">• 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

Applications	End Products
<ul style="list-style-type: none">• Battery - powered and Portable Equipment	<ul style="list-style-type: none">• Smartphones, Tablets• Cameras, DVRs, Camcorders

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
NCP120AMX080TCG	Pb-free Halide free	Active	Single	Positive	0.8	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120AMX105TCG	Pb-free Halide free	Active	Single	Positive	1.05	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120AMX110TCG	Pb-free Halide free	Active	Single	Positive	1.1	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120AMX115TCG	Pb-free Halide free	Active	Single	Positive	1.15	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120AMX120TCG	Pb-free Halide free	Active	Single	Positive	1.2	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120AMX150TCG	Pb-free Halide free	Active	Single	Positive	1.5	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120AMX180TCG	Pb-free Halide free	Active	Single	Positive	1.8	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120AMX210TCG	Pb-free Halide free	Active	Single	Positive	2.1	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120BMX080TCG	Pb-free Halide free	Active	Single	Positive	0.8	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120BMX105TCG	Pb-free Halide free	Active	Single	Positive	1.05	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120BMX110TCG	Pb-free Halide free	Active	Single	Positive	1.1	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120BMX115TCG	Pb-free Halide free	Active	Single	Positive	1.15	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120BMX120TCG	Pb-free Halide free	Active	Single	Positive	1.2	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120BMX150TCG	Pb-free Halide free	Active	Single	Positive	1.5	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120BMX180TCG	Pb-free Halide free	Active	Single	Positive	1.8	0.15	5.5	0.037	0.08	80	40	XDFN-6
NCP120BMX210TCG	Pb-free Halide free	Active	Single	Positive	2.1	0.15	5.5	0.037	0.08	80	40	XDFN-6

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

Created on: 7/11/2015