



Product Overview

NCP600: Linear Voltage Regulator, LDO, Low Power, High Performance, with Enable

For complete documentation, see the data sheet

Product Description

The NCP600 Low Dropout (LDO) Linear Voltage Regulator provides 150 mA of output current at fixed voltage options, or an adjustable output voltage from 5.0 V down to 1.250 V. It is designed for portable battery powered applications and offers high performance features such as low power operation, fast enable response time, and low dropout. The device is designed to be used with low cost ceramic capacitors and is packaged in the TSOP5.

Features	Benefits
<ul style="list-style-type: none">• UltraLow Dropout Voltage of 150 mV at 150 mA• Adjustable Output by External Resistors from 5.0 V down to 1.250 V• Fast Enable Turnon Time of 15 μs• Wide Supply Voltage Range Operating Range.• Excellent Line and Load Regulation• High Accuracy 2% Output Voltage Tolerance over All OperatingConditions• Typical Noise Voltage of 50 Vrms without a Bypass Capacitor• PbFree Package is Available• Fixed Voltage Options - 1.5V, 1.8V, 2.8V, 3.0V, 3.3V, 5.0V	<ul style="list-style-type: none">• Maintains full operation near end of battery life.• Customizable for all system voltages.• Faster system powerup.• Adaptable to many systems.• Prevents system reboots and spurious performance.• Predicable system performance.• Cost savings.• Good for the environment.• Saves external voltage divider.

Applications	End Products
<ul style="list-style-type: none">• SMPS Post-Regulation• Noise Sensitive Circuits - VCO, RF Stages, etc...	<ul style="list-style-type: none">• Hand-held Instrumentation• Camcorders and Cameras

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
NCP600MN130R2G	Pb-free Halide free	Active	Single	Positive	1.3	0.15	6	0.175	0.135	55	50	DFN-6
NCP600SN130T1G	Pb-free Halide free	Active	Single	Positive	1.3	0.15	6	0.175	0.135	55	50	TSOP-5 / SOT-23-5
NCP600SN150T1G	Pb-free Halide free	Active	Single	Positive	1.5	0.15	6	0.075	0.135	55	50	TSOP-5 / SOT-23-5
NCP600SN180T1G	Pb-free Halide free	Active	Single	Positive	1.8	0.15	6	0.125	0.14	55	50	TSOP-5 / SOT-23-5
NCP600SN250T1G	Pb-free Halide free	Active	Single	Positive	2.5	0.15	6	0.085	0.14	55	50	TSOP-5 / SOT-23-5
NCP600SN280T1G	Pb-free Halide free	Active	Single	Positive	2.8	0.15	6	0.075	0.14	55	50	TSOP-5 / SOT-23-5
NCP600SN300T1G	Pb-free Halide free	Active	Single	Positive	3	0.15	6	0.075	0.14	55	50	TSOP-5 / SOT-23-5
NCP600SN330T1G	Pb-free Halide free	Active	Single	Positive	3.3	0.15	6	0.075	0.145	55	50	TSOP-5 / SOT-23-5
NCP600SN350T1G	Pb-free Halide free	Active	Single	Positive	3.5	0.15	6	0.075	0.145	55	50	TSOP-5 / SOT-23-5
NCP600SN500T1G	Pb-free Halide free	Active	Single	Positive	5	0.15	6	0.075	0.145	55	50	TSOP-5 / SOT-23-5
NCP600SNADJT1G	Pb-free Halide free	Active	Single	Positive	Adjustable	0.15	6	0.075	0.1	55	50	TSOP-5 / SOT-23-5

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

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