

Product Overview

NCP600: LDO Regulator, 150 mA, Ultra-Low Dropout, Low Power, High Performance, with Enable

For complete documentation, see the data sheet.

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

- 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 μ s
- 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

Applications

- SMPS Post-Regulation
- Noise Sensitive Circuits - VCO, RF Stages, etc...

Benefits

- 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.

End Products

- Hand-held Instrumentation
- Camcorders and Cameras

Part Electrical Specifications

Product	Pricing (\$/Unit)	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)	PSR R (dB)	Noise (μV _{rms})	Enable	Power Good	Application	Package Type
NCP600MN130R2G	0.1787	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	1.3	0.15	1.8	6	0.175	0.135	55	50	Yes	No		DFN-6
NCP600SN130T1G	0.216	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	1.3	0.15	1.8	6	0.175	0.135	55	50	Yes	No		TSO P-5 / SOT-23-5
NCP600SN150T1G	0.216	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	1.5	0.15	1.8	6	0.075	0.135	55	50	Yes	No		TSO P-5 / SOT-23-5
NCP600SN180T1G	0.216	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	1.8	0.15	1.8	6	0.125	0.14	55	50	Yes	No		TSO P-5 / SOT-23-5
NCP600SN250T1G	0.1467	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	2.5	0.15	1.8	6	0.085	0.14	55	50	Yes	No		TSO P-5 / SOT-23-5
NCP600SN280T1G	0.216	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	2.8	0.15	1.8	6	0.075	0.14	55	50	Yes	No		TSO P-5 / SOT-23-5
NCP600SN300T1G	0.216	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	3	0.15	1.8	6	0.075	0.14	55	50	Yes	No		TSO P-5 / SOT-23-5
NCP600SN330T1G	0.216	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	3.3	0.15	1.8	6	0.075	0.145	55	50	Yes	No		TSO P-5 / SOT-23-5
NCP600SN350T1G	0.216	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	3.5	0.15	1.8	6	0.075	0.145	55	50	Yes	No		TSO P-5 / SOT-23-5
NCP600SN500T1G	0.216	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.15	1.8	6	0.075	0.145	55	50	Yes	No		TSO P-5 / SOT-23-5
NCP600SNADJT1G	0.1528	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	Adj	0.15	1.8	6	0.075	0.1	55	50	Yes	No		TSO P-5 / SOT-23-5

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

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