

Product Overview

NCP603: Linear Voltage Regulator, CMOS LDO, High Performance, 300 mA, with Enable and Enhanced ESD Protection

For complete documentation, see the data sheet.

The NCP603 Low Dropout (LDO) Linear Voltage Regulator provides 300 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 TSOP-5/SOT23-5.

Features

- Low Dropout Voltage
- 3.0% Output Voltage Tolerance
- Enhanced ESD range (HBM 3.5 kV, MM 400 V)
- Adjustable Output by External Resistors from 5.0 V down to 1.250 V
- Fast Enable Turn-on Time of 15 us
- Excellent Line and Load Regulation
- Typical Noise Voltage of 50 uVrms without a Bypass Capacitor
- Camcorders

Applications

- Consumer
- Communication Equipment
- SMPS Post Regulation
- Hand-held Instrumentation
- Portable Computing

Benefits

- Extends battery usage. Retains regulation longer
- Tight tolerance for high performance applications
- Enhanced robustness of the part against ESD events

End Products

- Cameras

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 _Q Typ (mA)	PSRR (dB)	Noise (μV _{rms})	Enable	Power Good	Package Type
NCP603SN130T1G	Pb-free	Active	Single	Positive	1.3	0.3	1.8	6.5	0.375	0.145	55	50	Yes	No	TSOP-5 / SOT-23-5
	Halide free														
NCP603SN150T1G	Pb-free	Active	Single	Positive	1.5	0.3	1.8	6.5	0.35	0.145	55	50	Yes	No	TSOP-5 / SOT-23-5
	Halide free														
NCP603SN180T1G	Pb-free	Active	Single	Positive	1.8	0.3	1.8	6.5	0.245	0.145	55	50	Yes	No	TSOP-5 / SOT-23-5
	Halide free														
NCP603SN250T1G	Pb-free	Active	Single	Positive	2.5	0.3	1.8	6.5	0.187	0.145	55	50	Yes	No	TSOP-5 / SOT-23-5
	Halide free														
NCP603SN280T1G	Pb-free	Active	Single	Positive	2.8	0.3	1.8	6.5	0.157	0.145	55	50	Yes	No	TSOP-5 / SOT-23-5
	Halide free														
NCP603SN300T1G	Pb-free	Active	Single	Positive	3	0.3	1.8	6.5	0.157	0.145	55	50	Yes	No	TSOP-5 / SOT-23-5
	Halide free														
NCP603SN330T1G	Pb-free	Active	Single	Positive	3.3	0.3	1.8	6.5	0.157	0.145	55	50	Yes	No	TSOP-5 / SOT-23-5
	Halide free														
NCP603SN350T1G	Pb-free	Active	Single	Positive	3.5	0.3	1.8	6.5	0.157	0.145	55	50	Yes	No	TSOP-5 / SOT-23-5
	Halide free														
NCP603SN500T1G	Pb-free	Active	Single	Positive	5	0.3	1.8	6.5	0.157	0.145	55	50	Yes	No	TSOP-5 / SOT-23-5
	Halide free														
NCP603SNADJT1G	Pb-free	Active	Single	Positive	Adjustable	0.3	1.8	6.5	0.375	0.145	55	50	Yes	No	TSOP-5 / SOT-23-5
	Halide free														

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

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