



Product Overview

NCP605: Linear Voltage Regulator, CMOS LDO, Low I_{GND}, with Enhanced ESD Protection

For complete documentation, see the data sheet

Product Description

The NCP605/NCP606 Low Dropout (LDO) Linear Voltage Regulator provides in excess of 500 mA of output current at fixed voltage options or an adjustable output voltage from 5.0 V down to 1.25 V. These devices are designed for space constrained and portable battery powered applications and offer additional features such as high PSRR, low noise operation, short circuit and thermal protection. The devices are designed to be used with low cost ceramic capacitors and are packaged in the DFN6 3x3.3. NCP605 is designed without enable pin, NCP606 is designed with enable pin.

Features

- Output Voltage Options:Adjustable, 1.5 V, 1.8 V, 2.5 V, 2.8 V, 3.0 V, 3.3 V, 5.0 V
- Adjustable Output by External Resistors from 5.0 V down to 1.25 V
- Current Limit 675 mA
- Low I_{GND} (Independent of Load)
- ±1.5% Output Voltage Tolerance Over All Operating Conditions(Adjustable)
- ±2% Output Voltage Tolerance Over All Operating Conditions(Fixed)
- NCP605 Fixed is Direct Replacement LP8345
- Typical Noise Voltage of 50 µVrms without a Bypass Capacitor
- Enhanced ESD Ratings: 4 kV Human Body Mode (HBM)
400 V Machine Model (MM)
- These are Pb-Free Devices

Applications	End Products
<ul style="list-style-type: none">• Battery Power Electronics• Portable Instrumentation	<ul style="list-style-type: none">• Hard Disk Drivers• Notebook Computers

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
NCP605MN15T2G	Pb-free Halide free	Active	Single	Positive	1.5	0.5	6	0.29	0.145	62	50	DFN-6
NCP605MN18T2G	Pb-free Halide free	Active	Single	Positive	1.8	0.5	6	0.25	0.145	62	50	DFN-6
NCP605MN25T2G	Pb-free Halide free	Active	Single	Positive	2.5	0.5	6	0.2	0.145	62	50	DFN-6
NCP605MN28T2G	Pb-free Halide free	Active	Single	Positive	2.8	0.5	6	0.19	0.145	62	50	DFN-6
NCP605MN30T2G	Pb-free Halide free	Active	Single	Positive	3	0.5	6	0.18	0.145	62	50	DFN-6
NCP605MN33T2G	Pb-free Halide free	Active	Single	Positive	3.3	0.5	6	0.17	0.145	62	50	DFN-6
NCP605MN50T2G	Pb-free Halide free	Active	Single	Positive	5	0.5	6	0.15	0.145	62	50	DFN-6
NCP605MNADJT2G	Pb-free Halide free	Active	Single	Positive	Adjustable	0.5	6	0.45	0.145	62	50	DFN-6
NCP606MN15T2G	Pb-free Halide free	Active	Single	Positive	1.5	0.5	6	0.29	0.145	62	50	DFN-6
NCP606MN18T2G	Pb-free Halide free	Active	Single	Positive	1.8	0.5	6	0.25	0.145	62	50	DFN-6
NCP606MN25T2G	Pb-free Halide free	Active	Single	Positive	2.5	0.5	6	0.2	0.145	62	50	DFN-6
NCP606MN28T2G	Pb-free Halide free	Active	Single	Positive	2.8	0.5	6	0.19	0.145	62	50	DFN-6
NCP606MN30T2G	Pb-free Halide free	Active	Single	Positive	3	0.5	6	0.18	0.145	62	50	DFN-6
NCP606MN33T2G	Pb-free Halide free	Active	Single	Positive	3.3	0.5	6	0.17	0.145	62	50	DFN-6
NCP606MN50T2G	Pb-free Halide free	Active	Single	Positive	5	0.5	6	0.15	0.145	62	50	DFN-6
NCP606MNADJT2G	Pb-free Halide free	Active	Single	Positive	Adjustable	0.5	6	0.45	0.145	62	50	DFN-6

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

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