



## Product Overview

### NCV565: Linear Voltage Regulator, LDO, 1.5 A

For complete documentation, see the data sheet

#### Product Description

The NCP565/NCV565 low dropout linear regulator provides 1.5 A in either fixed voltage options or in an adjustable voltage version from 7.7 V down to 0.9 V. The fast loop response and low dropout voltage make this regulator ideal for applications where low voltage and good load transient response are important. Device protection includes a current limit, short circuit protection, and thermal shutdown. The NCP565 is packaged in D2PAK, DFN6 or SOT-223.

#### Features

- Ultra-fast Transient Response (<1.0 us)
- Low Ground Current (1.5 mA at Iload = 1.5 A)
- Low Dropout Voltage (0.9V at Iload = 1.5 A)
- Low Noise (28 Vrms)
- 0.9 V Reference Voltage
- Adjustable Output Voltage from 7.7 V down to 0.9 V
- Current Limit Protection (3.3 A Typ)
- Thermal Shutdown Protection (160C)
- Pb-Free Packages are Available

#### Applications

- Servers, Networking and Communication equipment
- Post Regulation for Power Supplies

#### Part Electrical Specifications

Product	Compliance	Status	Output	Polarity	V <sub>O</sub> (V)	I <sub>O</sub> Typ (A)	V <sub>I</sub> Max (V)	V <sub>DO</sub> Typ (V)	I <sub>q</sub> Typ (mA)	PSRR (dB)	Noise (μV <sub>rms</sub> )	Package Type
NCV565D2T12R4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.2	1.5	9	0.9		75	28	D <sup>2</sup> PAK-3
NCV565D2TG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	Adjustable	1.5	9	0.9		75	28	D <sup>2</sup> PAK-5
NCV565D2TR4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	Adjustable	1.5	9	0.9		75	28	D <sup>2</sup> PAK-5
NCV565ST12T3G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.2	1.5	9	0.9		75	28	SOT-223-4 / TO-261-4

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com)

Created on: 7/11/2015