



Product Overview

NCP563: Linear Voltage Regulator, LDO, CMOS Low Iq, 80 mA

For complete documentation, see the data sheet

Product Description

This fixed output low dropout (LDO) linear voltage regulator is designed for handheld communication equipment and portable battery powered applications which require low quiescent. This series features an ultra-low quiescent current of 2.5  $\mu$ A. Each device contains a voltage reference unit, an error amplifier, a PMOS power transistor, resistors for setting output voltage, current limit, and temperature limit protection circuits. The NCP562 series provides an enable pin for ON/OFF control. The NCP562 has been designed to be used with low cost ceramic capacitors and requires a minimum output capacitor of 0.1 microF. The device is housed in the micro-miniature SC82-AB surface mount package. Standard voltage versions are 1.5, 1.8, 2.5, 2.7, 2.8, 3.0, 3.3, 3.5 and 5.0 V. Other voltages are available in 100 mV steps. Pb-free plating options are available.

Features

- Low Quiescent Current of 2.5  $\mu$ A Typical
- Low Output Voltage Option
- Output Voltage Accuracy of 2.0%
- Temperature Range of -40°C to 85°C
- NCP562 Provides an Enable Pin
- Pb-Free Packages are Available

Applications	End Products
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| <ul style="list-style-type: none"><li>• Battery Powered Instruments</li><li>• Hand-Held Instruments</li></ul> | <ul style="list-style-type: none"><li>• Camcorders and Cameras</li></ul> |
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## 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
NCP563SQ15T1G	Pb-free Halide free	Active	Single	Positive	1.5	0.08	6	0.55				SC-82AB-4
NCP563SQ18T1G	Pb-free Halide free	Active	Single	Positive	1.8	0.08	6	0.4				SC-82AB-4
NCP563SQ25T1G	Pb-free Halide free	Active	Single	Positive	2.5	0.08	6	0.25				SC-82AB-4
NCP563SQ27T1G	Pb-free Halide free	Active	Single	Positive	2.7	0.08	6	0.23				SC-82AB-4
NCP563SQ28T1G	Pb-free Halide free	Active	Single	Positive	2.8	0.08	6	0.23				SC-82AB-4
NCP563SQ30T1G	Pb-free Halide free	Active	Single	Positive	3	0.08	6	0.2				SC-82AB-4
NCP563SQ33T1G	Pb-free Halide free	Active	Single	Positive	3.3	0.08	6	0.19				SC-82AB-4
NCP563SQ50T1G	Pb-free Halide free	Active	Single	Positive	5	0.08	6	0.14				SC-82AB-4
NCV563SQ15T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.5	0.08	6					SC-82AB-4
NCV563SQ33T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.08	6					SC-82AB-4

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

Created on: 7/11/2015