

Product Overview

NCP551: LDO Regulator, 150 mA, Ultra-Low Dropout, Ultra-Low I_q

For complete documentation, see the data sheet.

The NCP551 series of fixed output low dropout (LDO) linear voltage regulators are designed for applications which require low quiescent current. The NCP551 series features an ultra-low quiescent current of 4.0 μ 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 NCP551 has been designed to be used with low cost ceramic capacitors and requires a minimum output capacitor of 0.1 μ F. The device is housed in the micro miniature TSOP-5 surface mount package. Standard voltage versions are 1.4, 1.5, 1.8, 2.5, 2.7, 2.8, 3.0, 3.3, and 5.0 V. Other voltages are available in 100 mV steps.

Features

- Low quiescent current of 4.0 μ A typical
- Maximum Operating Voltage of 12 V
- Low Output Voltage Option
- High Accuracy Output Voltage of 2.0%
- Industrial Temperature Range of -40° C to 85° C

Applications

- Battery Powered Instruments
- Hand-Held Instruments
- Communication Equipment
- Consumer

End Products

- 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 _q Typ (mA)	PSR R (dB)	Noise (μ V _{rms})	Enable	Power Good	Package Type
NCP551SN15T1G	0.192	Pb-free Halide free	Active	Single	Positive	1.5	0.15	1.7	12	0.13	0.004			Yes	No	TSO P-5 / SOT-23-5
NCP551SN18T1G	0.192	Pb-free Halide free	Active	Single	Positive	1.8	0.15	1.7	12	0.13	0.004			Yes	No	TSO P-5 / SOT-23-5
NCP551SN25T1G	0.192	Pb-free Halide free	Active	Single	Positive	2.5	0.15	1.7	12	0.13	0.004			Yes	No	TSO P-5 / SOT-23-5
NCP551SN27T1G	0.1799	Pb-free Halide free	Active	Single	Positive	2.7	0.15	1.7	12	0.04	0.004			Yes	No	TSO P-5 / SOT-23-5
NCP551SN28T1G	0.1615	Pb-free Halide free	Active	Single	Positive	2.8	0.15	1.7	12	0.04	0.004			Yes	No	TSO P-5 / SOT-23-5
NCP551SN29T1G	0.192	Pb-free Halide free	Active	Single	Positive	2.9	0.15	1.7	12	0.04	0.004			Yes	No	TSO P-5 / SOT-23-5
NCP551SN30T1G	0.1937	Pb-free Halide free	Active	Single	Positive	3	0.15	1.7	12	0.04	0.004			Yes	No	TSO P-5 / SOT-23-5
NCP551SN31T1G	0.192	Pb-free Halide free	Active	Single	Positive	3.1	0.15	1.7	12	0.04	0.004			Yes	No	TSO P-5 / SOT-23-5
NCP551SN32T1G	0.192	Pb-free Halide free	Active	Single	Positive	3.2	0.15	1.7	12	0.04	0.004			Yes	No	TSO P-5 / SOT-23-5
NCP551SN33T1G	0.1867	Pb-free Halide free	Active	Single	Positive	3.3	0.15	1.7	12	0.04	0.004			Yes	No	TSO P-5 / SOT-23-5
NCP551SN50T1G	0.1907	Pb-free Halide free	Active	Single	Positive	5	0.15	1.7	12	0.04	0.004			Yes	No	TSO P-5 / SOT-23-5

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

Created on: 4/7/2020