



Product Overview

NCP698: Linear Voltage Regulator, CMOS LDO, Low I_q and Low I_{GND}, 150 mA

For complete documentation, see the data sheet

Product Description

This series of fixed output low dropout (LDO) linear voltage regulators are 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 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 NCP698 series provides an enable pin for ON/OFF control. The NCP698 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 SC82-AB surface mount package. Standard voltage versions are 1.3, 1.5, 1.8, 2.5, 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

- Ultra Low quiescent and ground current
- Low Dropout Voltage
- Low Output Voltage Option
- Output Voltage Accuracy of 2.0%
- Temperature Range of -40C to 85C

Benefits

- Minimize power consumption
- Extends battery usage. Retains regulation longer.

Applications

- Battery Powered Instruments
- Hand-Held Instruments

End Products

- Camcorders and Cameras
- MP3 Players

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 (μ V _{rms})	Package Type
NCP698SQ13T1G	Pb-free Halide free	Active	Single	Positive	1.3	0.15	6	1.03	0.0025		100	SC-82AB-4
NCP698SQ15T1G	Pb-free Halide free	Active	Single	Positive	1.5	0.15	6	0.87	0.0025		100	SC-82AB-4
NCP698SQ18T1G	Pb-free Halide free	Active	Single	Positive	1.8	0.15	6	0.7	0.0025		100	SC-82AB-4
NCP698SQ25T1G	Pb-free Halide free	Active	Single	Positive	2.5	0.15	6	0.52	0.0025		100	SC-82AB-4
NCP698SQ28T1G	Pb-free Halide free	Active	Single	Positive	2.8	0.15	6	0.42	0.0025		100	SC-82AB-4
NCP698SQ30T1G	Pb-free Halide free	Active	Single	Positive	3	0.15	6	0.37	0.0025		100	SC-82AB-4
NCP698SQ33T1G	Pb-free Halide free	Active	Single	Positive	3.3	0.15	6	0.36	0.0025		100	SC-82AB-4
NCP698SQ35T1G	Pb-free Halide free	Active	Single	Positive	3.5	0.15	6	0.36	0.0025		100	SC-82AB-4
NCP698SQ50T1G	Pb-free Halide free	Active	Single	Positive	5	0.15	6	0.28	0.0025		100	SC-82AB-4

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

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