

## Product Overview

### NCP698: LDO Regulator, 150 mA, Ultra-Low I<sub>q</sub>

For complete documentation, see the data sheet.

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 uA. 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 microF. 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	Pricing (\$/Unit)	Compliance	Status	Output	Polarity	V <sub>O</sub> (V)	I <sub>O</sub> Typ (A)	V <sub>I</sub> Min (V)	V <sub>I</sub> Max (V)	V <sub>DO</sub> Typ (V)	I <sub>q</sub> Typ (mA)	PSR R (dB)	Noise (μV <sub>rms</sub> )	Enable	PowerGood	Package Type
NCP698SQ13T1G	0.0884	Pb-free Halide free	Active	Single	Positive	1.3	0.15	2.5	6	1.03	0.0025		100	Yes	No	SC-82AB-4
NCP698SQ15T1G	0.1088	Pb-free Halide free	Active	Single	Positive	1.5	0.15	2.5	6	0.87	0.0025		100	Yes	No	SC-82AB-4
NCP698SQ18T1G	0.0977	Pb-free Halide free	Active	Single	Positive	1.8	0.15	2.5	6	0.7	0.0025		100	Yes	No	SC-82AB-4
NCP698SQ25T1G	0.0853	Pb-free Halide free	Active	Single	Positive	2.5	0.15	2.5	6	0.52	0.0025		100	Yes	No	SC-82AB-4
NCP698SQ28T1G	0.0897	Pb-free Halide free	Active	Single	Positive	2.8	0.15	2.5	6	0.42	0.0025		100	Yes	No	SC-82AB-4
NCP698SQ30T1G	0.0949	Pb-free Halide free	Active	Single	Positive	3	0.15	2.5	6	0.37	0.0025		100	Yes	No	SC-82AB-4
NCP698SQ33T1G	0.1068	Pb-free Halide free	Active	Single	Positive	3.3	0.15	2.5	6	0.36	0.0025		100	Yes	No	SC-82AB-4
NCP698SQ35T1G	0.0992	Pb-free Halide free	Active	Single	Positive	3.5	0.15	2.5	6	0.36	0.0025		100	Yes	No	SC-82AB-4
NCP698SQ50T1G	0.1004	Pb-free Halide free	Active	Single	Positive	5	0.15	2.5	6	0.28	0.0025		100	Yes	No	SC-82AB-4

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

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