Product Overview

NCV662: Linear Voltage Regulator, CMOS LDO, Low Iq, 100 mA, with Enable

For complete documentation, see the data sheet

Product Description

This series of Low Quiescent Current Low Dropout (LDO) Linear Voltage Regulators initially designed for handheld communication equipment and portable battery powered applications can be used in automotive application requiring ultra low quiescent current. It should be used as post regulation device as the product is not protected against high input transient voltages inherent to automotive battery operation.

This series features an ultra-low quiescent current of 2.5µA as well as an Enable pin that allows to decrease the current consumption down to 0.1µA typical. Each device contains a voltage reference unit, an error amplifier, a PMOS power transistor, resistors for setting output voltage, and protections such as current limit and temperature limit circuits.

The NCV662 LDO Linear Voltage Regulator has been designed to be used with low cost ceramic capacitors and requires a minimum output capacitor of 0.1 µF. The device is housed in the micro-miniature SC82-AB surface mount package. Pb-free plating options are available. Standard voltage versions are 1.5, 1.8, 2.5, 2.7, 2.8, 3.0, 3.3, and 5.0 V.

Features

- Ultra Low Quiescent Current of 2.5 uA Typical
- Low Output Voltage Option down to 1.5V with +/-2% output voltage accuracy
- Temperature Range of -40C to 125C
- Enable pin
- Integrated protections
  Current Limit
  Thermal Shutdown

Applications

- Automotive

End Products

- Infotainment:
  Car, Satellite Radio
  Navigation systems
- Body Electronic

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 (μV_{rms})	Package Type
NCV662SQ15T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.5	0.1	6	0.68	0.0025		100	SC-82AB-4
NCV662SQ18T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.8	0.1	6	0.5	0.0025		100	SC-82AB-4
NCV662SQ25T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.5	0.1	6	0.3	0.0025		100	SC-82AB-4
NCV662SQ27T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.7	0.1	6	0.28	0.0025		100	SC-82AB-4
NCV662SQ28T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.8	0.1	6	0.28	0.0025		100	SC-82AB-4
NCV662SQ30T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3	0.1	6	0.23	0.0025		100	SC-82AB-4
NCV662SQ33T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.1	6	0.23	0.0025		100	SC-82AB-4
NCV662SQ50T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.1	6	0.17	0.0025		100	SC-82AB-4

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

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