

Product Overview

NCV8665: Linear Voltage Regulator, LDO, Very Low Iq, 150 mA, with Reset and Delay

For complete documentation, see the data sheet

Product Description

The NCV8665 is a precision 5.0 V fixed output, low dropout integrated voltage regulator with an output current capability of 150 mA. Careful management of light load current consumption, combined with a low leakage process, achieve a typical quiescent ground current of 30 μ A. NCV8665 is pin for pin compatible with the NCV8675 and the NCV4275 and it could replace these parts when lower output current, and very low quiescent current is required. The output voltage is accurate within $\pm 2.0\%$, and maximum dropout voltage is 600 mV at full rated load current. It is internally protected against 45 V input transients, input supply reversal, output overcurrent faults, and excess die temperature. No external components are required to enable these features.

Features

- 5.0 V Fixed Output Voltage with 2% Output Voltage Accuracy (3.3 V and 2.5 V Available Upon request)
- Maximum 40 A Quiescent Current with 100 μ A load
- Protections:
-42 V Reverse Voltage Protection
Short Circuit
- AEC-Q100 Qualified
- Very Low Dropout Voltage

Benefits

- Capable to supply newest microprocessors
- Meet 100 μ A max module car manufacturer ignition off quiescent current requirement
- No external components required to enable protections required within any automotive applications.
- Meet automotive qualification requirements

Applications

- Engine Control Module
- Body and Chassis
- Powertrain

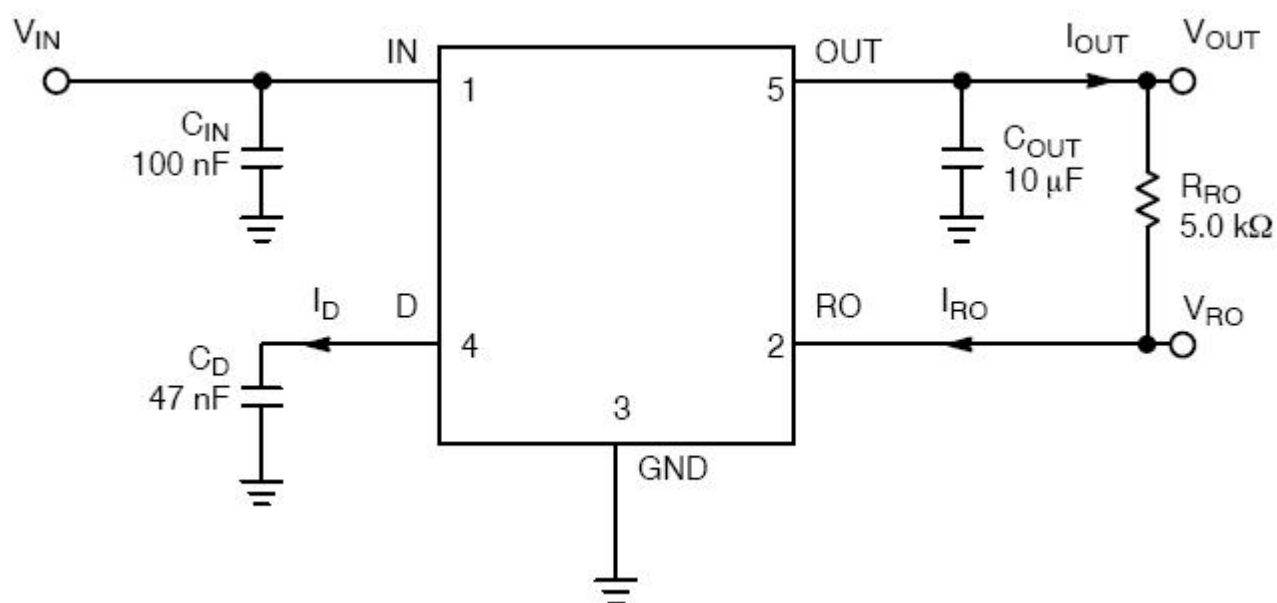
End Products

- Automotive

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
NCV8665D50G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.15	45	0.25	0.03	69		SOIC-8
NCV8665D50R2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.15	45	0.25	0.03	69		SOIC-8
NCV8665DS50R4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.15	45	0.25	0.03	69		² D PAK-5

Application Diagram



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

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