



Product Overview

NCV4290: 450 mA LDO Linear Voltage Regulator with Power Good

For complete documentation, see the data sheet

Product Description

The NCV4290 is an integrated low dropout regulator designed for use in harsh automotive environments. It includes wide operating temperature and input voltage ranges. The output is regulated at 5 V and is rated to 450 mA of output current.

It also provides a number of features, including overcurrent protection, overtemperature protection and a programmable microprocessor power good signal. The NCV4290 is available in the DPAK and D²PAK surface mount package. The output is stable over wide output capacitance and ESR range.

Features

- 5.0 V, 2% Output Voltage Accuracy with 450 mA Output Current
- 500 mV (max) Dropout Voltage
- Active Power Good Output
Power Good Low Down to $V_Q = 1.0$ V
- Fault Protection
+45 V Peak Transient Voltage
-42 V Reverse Voltage
Short Circuit Protection
Thermal Overload Protection
- AEC-Q100 Qualified
- These are Pb-Free Devices

Benefits

- Can operate with newest microprocessor.
- Can operate during cranking at low input voltage.
- Integrated control of microprocessor power supply - lower cost and space
- No external components required to enable protections required within any automotive applications.

Applications

- Auto Body Electronics
- Engine Control Unit

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 (μV_{rms})	Package Type
NCV4290DS50R4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.45	45	0.25	0.17	60		D ² PAK-5
NCV4290DT50RKG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.45	45	0.25	0.17	60		DPAK-5

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

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