

## Product Overview

### NCV4290: LDO Regulator, 450 mA, Low Dropout

For complete documentation, see the data sheet.

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 D<sup>2</sup>PAK 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)	$V_I$ Min (V)	$V_I$ Max (V)	$V_{DO}$ Typ (V)	$I_Q$ Typ (mA)	PSRR (dB)	Noise ( $\mu V_{rms}$ )	Enable	Power Good	Package Type
NCV4290DS50R4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.45	-42	45	0.25	0.17	60	-	No	Yes	D <sup>2</sup> PAK-5
NCV4290DT50RKG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.45	-42	45	0.25	0.17	60	-	No	Yes	DPAK-5

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

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