NCV4294C

LDO Regulator, 30 mA, Ultra-Low Dropout

Product Overview

For complete documentation, see the data sheet.

The NCV4294C is a monolithic integrated low dropout voltage regulator with an output current capability of 30 mA available in the TSOP–5 package. The output voltage is accurate within ±4.0% with a maximum dropout voltage of 250 mV with an input up to 45 V. Low quiescent current is a feature typically drawing only 160 µA with a 1 mA load. This part is ideal for automotive and all battery operated microprocessor equipment. The regulator is protected against reverse battery, short circuit and thermal overload conditions.

Features

- Very Low Dropout 65 mV typ. (250 mV max.) at 20 mA Load Current
- Protections: 60 V Transient Input Voltage Reverse Polarity and Reverse Bias Protection Current Limitation Thermal Shutdown
- 3.3 V, 5.0 V with ±4% Output Voltage Accuracy over full Temperature Range up to 30 mA
- AEC-Q100 Grade 1 Qualified and PPAP Capable

Benefits

- Operates at lower input voltage during cranking
- Suitable in harsh automotive environment

Applications

- Automotive

Part Electrical Specifications

Product	Pricing ($/Unit)	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 (μV_{rms})	Enable	PowerGood	Application	Package Type
NCV4294CSN33T1G	0.3	A P Pb H	Active	Single	Positive	3.3	0.03	3.8	45	0.065	0.16	60	-	No	No	Automotive	TSOP-5 / SOT-23-5
NCV4294CSN50T1G	0.3	A P Pb H	Active	Single	Positive	5	0.03	5.5	45	0.065	0.16	60	-	No	No	Automotive	TSOP-5 / SOT-23-5

Application Diagram