Product Overview

NCV47700: 5 V to 20 V Adjustable Low Dropout Regulator with Adjustable Current Limit

For complete documentation, see the data sheet

Product Description

The NCV47700 is a 350 mA output current integrated low dropout regulator designed for use in harsh automotive environments. It includes wide operating temperature and input voltage ranges. The device is offered with adjustable voltage versions available in 6% output voltage accuracy. It has a high peak input voltage tolerance and reverse input voltage protection. It also provides overcurrent protection, overtemperature protection and enable for control of the state of the output voltage. The integrated current sense feature provides diagnosis and system protection functionality. The current limit of the device is adjustable by resistor connected to CSO pin. Voltage on CSO pin is proportional to output current.

Features

- Enable Input
- Adjustable Current Limit (from 10 mA to 350 mA)with 10% accuracy
- AEC-Q100 Qualified
- Adjustable Voltage Version (from 5 V to 20 V) 6% Output Voltage
- Protection: Current Limitation, Thermal Shutdown, Reverse Input Voltage

Benefits

- Save battery life - quiescent current down to 10µA max.
- Current sense feature provides diagnosis and system protection functionality.
- Meets automotive qualification requirements.

Applications

- Audio and Infotainment System
- Instrument Cluster
- Navigation
- Satellite Radio

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
NCV47700DAJR2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive		0.35	40	0.25	0.15	70	100	SOIC-8
NCV47700PDAJR2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	Adjustable	0.35	40	0.25	0.15	70	100	SOIC-8 EP

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