

## Product Overview

### NCP57152: LDO Regulator, 1.5 A, Low Dropout, Fast Transient Response

For complete documentation, see the data sheet.

The NCP57152 is a high precision, very low dropout (VLDO), low minimum input voltage and low ground current positive voltage regulator that is capable of providing an output current in excess of 1.5 A with a typical dropout voltage of 330 mV at 1.5 A load current and input voltage from 1.8 V and up. The device is stable with ceramic output capacitors. The device can withstand up to 18 V max input voltage. Internal protection features consist of output current limiting, built-in thermal shutdown and reverse output current protection. Logic level enable and error flag pins are available. The NCP57152 is an Adjustable Voltage device and is available in D2PAK-5 and DFN8 packages.

### Features

- Output Current in Excess of 1.5 A
- Minimum Operating Input Voltage 1.8 V for Full 1.5 A Output Current
- 330 mV Typical Dropout Voltage at 1.5 A
- Adjustable Output Voltage Range from 1.24 V to 13 V
- Low Ground Current
- Fast Transient Response
- Stable with Ceramic Output Capacitor
- Logic Compatible Enable and Error Flag Pins
- Current Limit, Reverse Current and Thermal Shutdown Protection
- Operation up to 13.5 V Input Voltage

For more features, see the data sheet

### Applications

- Functional Replacement for Industry Standard MIC29150, MIC39150, MIC37150 with Improved Minimum Input Voltage Specification
- Consumer and Industrial Equipment Point of Regulation
- Servers and Networking Equipment
- FPGA, DSP and Logic Power Supplies
- Switching Power Supply Post Regulation

### End Products

- Battery Chargers

### Part Electrical Specifications

Product	Compliance	Status	Output	Polarity	V <sub>O</sub> (V)	I <sub>O</sub> Typ (A)	V <sub>I</sub> Min (V)	V <sub>I</sub> Max (V)	V <sub>DO</sub> Typ (V)	I <sub>Q</sub> Typ (mA)	PSRR (dB)	Noise (μV <sub>rms</sub> )	Enable	Power Good	Package Type
NCP57152DSADJR4G	Pb-free	Active	Single	Positive	Adj	1.5	1.8	18	0.33	40	65	-	Yes	No	D <sup>2</sup> PAK-5
	Halide free														
NCP57152MNADJTYG	Pb-free	Active	Single	Positive	Adj	1.5	1.8	18	0.33	40	65	-	Yes	Yes	DFN-8
	Halide free														
NCV57152DSADJR4G	AEC Qualified	Active	Single	Positive	Adj	1.5	1.8	18	0.33	40	65	-	Yes	No	D <sup>2</sup> PAK-5
	PPAP Capable														
	Pb-free														
	Halide free														
NCV57152MNADJTYG	AEC Qualified	Active	Single	Positive	Adj	1.5	1.8	18	0.33	40	65	-	Yes	Yes	DFN-8
	PPAP Capable														
	Pb-free														
	Halide free														

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