



Product Overview

NCP752: Voltage Regulator, LDO, Ultra-Low Iq, Ultra -Low Noise, 200 mA, with Power-Good Flag

For complete documentation, see the data sheet

Product Description

Noise sensitive applications and precision instrumentation require very clean power supplies. The NCP752 is a 200mA LDO that provides the engineer with a very stable, accurate voltage with ultra-low noise and high Power Supply Rejection. The device doesn't require any additional noise bypass capacitor to achieve ultra-low noise levels. In order to optimize the performance for battery operated applications, the NCP752 employs the Auto Low-Power Function for Ultra-Low Quiescent Current consumption.

Features	Benefits
<ul style="list-style-type: none">• Operating Input Voltage: 2.0V to 5.5V• Ultra-Low Output Noise: Typ. 11uVrms• Ultra-Low No-Load Ground Current of Typ. 10uVrms• Adaptive Ground Current Feature• Available Fixed Output Voltage Options: 0.8V to 3.5V• Enable/Shutdown Pin Function• Ultra-Low Shutdown Mode Current: Max. 1uA• Active Output Discharge• Output Short Circuit and Current Limit Protection• Thermal Shutdown Protection	<ul style="list-style-type: none">• Well suited for battery powered applications• Very well suited for noise sensitive applications.• Improved efficiency during light-load conditions• Improved dynamic performance• Sub-bandgap output voltages available• Allows to turn ON/OFF the Regulator using logic I/O signal• Minimizes battery drain when placed in the Shutdown Mode• Fast Output Voltage Turn-off• Assures robust design• Protects from overheating

Applications	End Products
<ul style="list-style-type: none">• Low Power Sensor Power Supplies• Noise Sensitive Applications• Low Power MCU Power Supply• Low Power FPGAs, DSPs	<ul style="list-style-type: none">• Portable Devices• Wireless Headsets• Precision Instrumentation• Computing Products

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
NCP752AMX18TCG	Pb-free Halide free	Active	Single	Positive	1.8	0.2	6	190	0.012	68	11.5	XDFN-6
NCP752AMX28TCG	Pb-free Halide free	Active	Single	Positive	2.8	0.2	6		0.012	68	11.5	XDFN-6
NCP752AMX30TCG	Pb-free Halide free	Active	Single	Positive	3	0.2	6		0.012	68	11.5	XDFN-6
NCP752AMX33TCG	Pb-free Halide free	Active	Single	Positive	3.3	0.2	6	135	0.012	68	11.5	XDFN-6
NCP752ASN18T1G	Pb-free Halide free	Active	Single	Positive	1.8	0.2	6	190	0.012	68	11.5	TSOP-5 / SOT-23-5
NCP752ASN28T1G	Pb-free Halide free	Active	Single	Positive	2.8	0.2	6		0.012	68	11.5	TSOP-5 / SOT-23-5
NCP752ASN30T1G	Pb-free Halide free	Active	Single	Positive	3	0.2	6		0.012	68	11.5	TSOP-5 / SOT-23-5
NCP752ASN33T1G	Pb-free Halide free	Active	Single	Positive	3.3	0.2	6	135	0.012	68	11.5	TSOP-5 / SOT-23-5
NCP752BMX18TCG	Pb-free Halide free	Active	Single	Positive	1.8	0.2	6	190	0.012	68	11.5	XDFN-6
NCP752BMX28TCG	Pb-free Halide free	Active	Single	Positive	2.8	0.2	6		0.012	68	11.5	XDFN-6
NCP752BMX30TCG	Pb-free Halide free	Active	Single	Positive	3	0.2	6		0.012	68	11.5	XDFN-6
NCP752BMX33TCG	Pb-free Halide free	Active	Single	Positive	3.3	0.2	6	135	0.012	68	11.5	XDFN-6
NCP752BSN18T1G	Pb-free Halide free	Active	Single	Positive	1.8	0.2	6	190	0.012	68	11.5	TSOP-5 / SOT-23-5
NCP752BSN28T1G	Pb-free Halide free	Active	Single	Positive	2.8	0.2	6		0.012	68	11.5	TSOP-5 / SOT-23-5
NCP752BSN30T1G	Pb-free Halide free	Active	Single	Positive	3	0.2	6		0.012	68	11.5	TSOP-5 / SOT-23-5
NCP752BSN33T1G	Pb-free Halide free	Active	Single	Positive	3.3	0.2	6	135	0.012	68	11.5	TSOP-5 / SOT-23-5

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

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