

Product Overview

NCP303: Voltage Detector Series with Programmable Delay and Open Drain N-Channel Output

For complete documentation, see the data sheet.

The NCP/NCV302 and NCP/NCV303 series are second generation ultra-low current voltage detectors that contain a programmable time delay generator. These devices are specifically designed for use as reset controllers in portable microprocessor based systems where extended battery life is paramount. Each series features a highly accurate under voltage detector with hysteresis and an externally programmable time delay generator. This combination of features prevents erratic system reset operation. The NCP/NCV302 series consists of complementary output devices that are available with either an active high or active low reset. The NCP/NCV303 series has an open drain N-channel output with an active low reset output.

Features

- NCV Version for Automotive
- Quiescent Current of 0.5 uA Typical
- High Accuracy Under Voltage Threshold of 2.0%
- Externally Programmable Time Delay Generator
- Wide Operating Voltage Range of 0.8 V to 10 V
- Complementary or Open Drain Output
- Active Low or Active High Reset
- Pb-Free Packages are Available

Benefits

- AEC-Q100 Qualified

Applications

- Microprocessor Reset Controller
- Low Battery Detection
- Power Fail Indicator
- Battery Backup Detection
- Battery Backup Detection

Part Electrical Specifications

Product	Compliance	Status	Voltages Monitored	V _{CC} Max (V)	V _(TO) Typ (V)	I _O Typ (μA)	Reset Active State	Reset Timer	Manual Reset	Watchdog Timer	Package Type
NCP303LSN09T1G	Pb-free Halide free	Active	1	10	0.9	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN09T2G	PPAP Capable Pb-free Halide free	Active	1	10	0.9	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN10T1G	Pb-free Halide free	Active	1	10	1	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN11T1G	Pb-free Halide free	Active	1	10	1.1	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN13T1G	Pb-free Halide free	Active	1	10	1.3	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN14T1G	Pb-free Halide free	Active	1	10	1.4	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN15T1G	Pb-free Halide free	Active	1	10	1.5	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN16T1G	Pb-free Halide free	Active	1	10	1.6	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN17T1G	Pb-free Halide free	Active	1	10	1.7	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN18T1G	Pb-free Halide free	Active	1	10	1.8	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN20T1G	Pb-free Halide free	Active	1	10	2	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN22T1G	Pb-free Halide free	Active	1	10	2.2	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN23T1G	Pb-free Halide free	Active	1	10	2.3	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN24T1G	Pb-free Halide free	Active	1	10	2.4	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN25T1G	Pb-free Halide free	Active	1	10	2.5	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN26T1G	Pb-free Halide free	Active	1	10	2.6	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN27T1G	Pb-free Halide free	Active	1	10	2.7	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN28T1G	Pb-free Halide free	Active	1	10	2.8	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN29T1G	Pb-free Halide free	Active	1	10	2.9	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN30T1G	Pb-free Halide free	Active	1	10	3	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN31T1G	Pb-free Halide free	Active	1	10	3.1	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN32T1G	Pb-free Halide free	Active	1	10	3.2	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN33T1G	Pb-free Halide free	Active	1	10	3.3	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN34T1G	Pb-free Halide free	Active	1	10	3.4	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN36T1G	Pb-free Halide free	Active	1	10	3.6	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
NCP303LSN38T1G	Pb-free Halide free	Active	1	10	3.8	0.5	Low	No	No	No	TSOP-5 / SOT-23-5

NCP303LSN40T1G	Pb-free	Active	1	10	4	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	Halide free										
NCP303LSN42T1G	Pb-free	Active	1	10	4.2	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	Halide free										
NCP303LSN44T1G	Pb-free	Active	1	10	4.4	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	Halide free										
NCP303LSN45T1G	Pb-free	Active	1	10	4.5	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	Halide free										
NCP303LSN46T1G	Pb-free	Active	1	10	4.6	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	Halide free										
NCP303LSN47T1G	Pb-free	Active	1	10	4.8	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	Halide free										
NCP303LSN49T1G	Pb-free	Active	1	10	4.9	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	Halide free										
NCV303LSN09T1G	AEC Qualified	Active	1	10	0.9	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	PPAP Capable										
	Pb-free										
	Halide free										
NCV303LSN11T1G	AEC Qualified	Active	1	10	1.1	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	PPAP Capable										
	Pb-free										
	Halide free										
NCV303LSN22T1G	AEC Qualified	Active	1	10	2.2	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	PPAP Capable										
	Pb-free										
	Halide free										
NCV303LSN24T1G	PPAP Capable	Active	1	10	2.4	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	Pb-free										
	Halide free										
NCV303LSN25T1G	AEC Qualified	Active	1	10	2.5	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	PPAP Capable										
	Pb-free										
	Halide free										
NCV303LSN27T1G	PPAP Capable	Active	1	10	2.7	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	Pb-free										
	Halide free										
NCV303LSN31T1G	AEC Qualified	Active	1	10	3.1	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	PPAP Capable										
	Pb-free										
	Halide free										
NCV303LSN34T1G	AEC Qualified	Active	1	10	3.4	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	PPAP Capable										
	Pb-free										
	Halide free										
NCV303LSN40T1G	AEC Qualified	Active	1	10	4	0.5	Low	No	No	No	TSOP-5 / SOT-23-5
	PPAP Capable										
	Pb-free										
	Halide free										

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

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