

Product Overview

NCP5661: LDO Regulator, 1 A, Low Noise, with Enable

For complete documentation, see the data sheet.

The NCP5661 is a high performance, low dropout (LDO) linear voltage regulator designed for high power applications that require up to 1.0 A current. It is offered in both fixed and adjustable output versions. With output voltages as low as 0.9 V and ultra-fast response times for load transients, the NCP5661 also provides additional features such as Enable and Error Flag (for the fixed output version), increasing the utility of this device. A thermally robust, 5 pin DPAK or DFN 3.0 x 3.3 mm, combined with an architecture that offers low ground current (independent of load), provides for a superior high-current LDO solution.

Features

- Ultra-Fast Transient Response (Settling Time: 1-3 μ s)
- Low Noise Without Bypass Capacitor (26 μ Vrms)
- Low Ground Current Independent of Load(3.0 mA Maximum)
- Fixed/Adjustable Output Versions
- Enable Function
- Error Flag (Fixed Output Version)
- Current Limit Protection
- Thermal Protection
- 0.9 V Reference Voltage for Ultra-Low Output Operation
- Power Supply Rejection Ratio > 65 dB

For more features, see the data sheet

Applications

- Servers
- Networking Equipment
- Automotive

Part Electrical Specifications

Product	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	Power Good	Package Type
NCP5661DT12RKG	Pb-free Halide free	Active	Single	Positive	1.2	1	2	9	1	1.3	65	26	Yes	Yes	DPAK-5
NCP5661DT18RKG	Pb-free Halide free	Active	Single	Positive	1.8	1	2	9	1	1.3	65	26	Yes	Yes	DPAK-5
NCP5661DT25RKG	Pb-free Halide free	Active	Single	Positive	2.5	1	2	9	1	1.3	65	26	Yes	Yes	DPAK-5
NCP5661DT33RKG	Pb-free Halide free	Active	Single	Positive	3.3	1	2	9	1	1.3	65	26	Yes	Yes	DPAK-5
NCP5661DTADJRKG	Pb-free Halide free	Active	Single	Positive	Adj	1	2	9	1	1.3	65	26	Yes	No	DPAK-5
NCP5661MN12T2G	Pb-free Halide free	Active	Single	Positive	1.2	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCP5661MN15T2G	Pb-free Halide free	Active	Single	Positive	1.5	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCP5661MN18T2G	Pb-free Halide free	Active	Single	Positive	1.8	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCP5661MN25T2G	Pb-free Halide free	Active	Single	Positive	2.5	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCP5661MN28T2G	Pb-free Halide free	Active	Single	Positive	2.8	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCP5661MN30T2G	Pb-free Halide free	Active	Single	Positive	3	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCP5661MN33T2G	Pb-free Halide free	Active	Single	Positive	3.3	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCP5661MNADJT2G	Pb-free Halide free	Active	Single	Positive	Adj	1	2	9	1	1.3	65	26	Yes	No	DFN-6
NCV5661DT12RKG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.2	1	2	9	1	1.3	65	26	Yes	Yes	DPAK-5
NCV5661DT18RKG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.8	1	2	9	1	1.3	65	26	Yes	Yes	DPAK-5
NCV5661DT33RKG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	1	2	9	1	1.3	65	26	Yes	Yes	DPAK-5
NCV5661DTADJRKG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	Adj	1	2	9	1	1.3	65	26	Yes	No	DPAK-5
NCV5661MN12T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.2	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCV5661MN15T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.5	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6

NCV5661MN18T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.8	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCV5661MN25T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.5	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCV5661MN28T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.8	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCV5661MN30T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCV5661MN33T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	1	2	9	1	1.3	65	26	Yes	Yes	DFN-6
NCV5661MNADJT2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	Adj	1	2	9	1	1.3	65	26	Yes	No	DFN-6

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

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