

Product Overview

NCV8161: LDO Regulator, 450 mA, Low Dropout, Low Iq, Ultra-High PSRR, Ultra-Low Noise

For complete documentation, see the data sheet.

The NCV8161 is a linear regulator capable of supplying 450 mA output current. Designed to meet the requirements of RF and analog circuits, the NCV8161 device provides low noise, high PSRR, low quiescent current, and very good load/line transients. The device is designed to work with a 1 μ F input and a 1 μ F output ceramic capacitor. It is available in TSOP-5 and XDFN-4 0.65P, 1 mm x 1 mm.

Similar Products:

	NCV8160	NCV8161	NCV8163	NCV8165
Output Current (A)	0.25	0.45	0.25	0.50
PSRR f=1 kHz (dB)	98	98	92	85
Noise (μ VRMS)	10	10	6.5	8.5

Features

- Ultra High PSRR 90dB at 1kHz, 20mA
- Ultra Low Output Noise 10 μ VRMS
- Very Low Dropout 225mV@450mA
- Ultra Low Quiescent current 18 μ A

Applications

- RF Modules
- Automotive Infotainment Systems
- Parking camera module
- Precision Analog Circuits
- Audio codec

Benefits

- Excellent for power sensitive device like camera module and wireless
- Very well suited for noise sensitive application
- Allow work with very low VIN-VOUT difference
- Improved efficiency during light load conditions

End Products

- Parking camera
- Intelligent rear mirror
- Infotainment systems

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Output	Polarity	V _O (V)	I _{O Typ} (A)	V _{Min} (V)	V _{Max} (V)	V _{DO Typ} (V)	I _{q Typ} (mA)	PSR R (dB)	Noise (μV _{rms})	Enable	PowerGood	Package Type
NCV8161AMX180TBG	0.112	AEC Qualified	Active	Single	Positive	1.8	0.45	1.9	5.5	0.325	0.018	98	10	Yes	No	XDF N-4
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8161AMX250TBG	0.112	AEC Qualified	Active	Single	Positive	2.5	0.45	1.9	5.5	0.018	98	10	Yes	No	XDF N-4	
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8161AMX280TBG	0.112	AEC Qualified	Active	Single	Positive	2.8	0.45	1.9	5.5	0.26	0.018	98	10	Yes	No	XDF N-4
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8161AMX290TBG	0.112	AEC Qualified	Active	Single	Positive	2.9	0.45	1.9	5.5	0.19	0.018	98	10	Yes	No	XDF N-4
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8161AMX300TBG	0.112	AEC Qualified	Active	Single	Positive	3	0.45	1.9	5.5	0.24	0.018	98	10	Yes	No	XDF N-4
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8161AMX330TBG	0.112	AEC Qualified	Active	Single	Positive	3.3	0.45	1.9	5.5	0.175	0.018	98	10	Yes	No	XDF N-4
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8161ASN180T1G	0.2	AEC Qualified	Active	Single	Positive	1.8	0.45	1.9	5.5	0.365	0.018	98	10	Yes	No	TSO P-5 / SOT-23-5
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8161ASN280T1G	0.2	AEC Qualified	Active	Single	Positive	2.8	0.45	1.9	5.5	0.26	0.018	98	10	Yes	No	TSO P-5 / SOT-23-5
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8161ASN300T1G	0.2	AEC Qualified	Active	Single	Positive	3	0.45	1.9	5.5	0.24	0.018	98	10	Yes	No	TSO P-5 / SOT-23-5
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8161ASN330T1G	0.2	AEC Qualified	Active	Single	Positive	3.3	0.45	1.9	5.5	0.225	0.018	98	10	Yes	No	TSO P-5 / SOT-23-5
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8161BMX180TBG	0.112	AEC Qualified	Active	Single	Positive	1.8	0.45	1.9	5.5	0.325	0.018	98	10	Yes	No	XDF N-4
		PPAP Capable														
		Pb-free														
		Halide free														

NCV8161BMX250TBG	0.112	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.5	0.45	1.9	5.5	0.018	98	10	Yes	No	XDF N-4	
NCV8161BMX280TBG	0.112	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.8	0.45	1.9	5.5	0.26	0.018	98	10	Yes	No	XDF N-4
NCV8161BMX300TBG	0.112	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3	0.45	1.9	5.5	0.185	0.018	98	10	Yes	No	XDF N-4
NCV8161BMX330TBG	0.112	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.45	1.9	5.5	0.175	0.018	98	10	Yes	No	XDF N-4
NCV8161BSN180T1G	0.2	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.8	0.45	1.9	5.5	0.365	0.018	98	10	Yes	No	TSO P-5 / SOT-23-5
NCV8161BSN280T1G	0.2	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.8	0.45	1.9	5.5	0.26	0.018	98	10	Yes	No	TSO P-5 / SOT-23-5
NCV8161BSN300T1G	0.2	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3	0.45	1.9	5.5	0.24	0.018	98	10	Yes	No	TSO P-5 / SOT-23-5
NCV8161BSN330T1G	0.2	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.45	1.9	5.5	0.225	0.018	98	10	Yes	No	TSO P-5 / SOT-23-5

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

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