

Product Overview

NCV8163: LDO Regulator, 250 mA, Ultra-Low Dropout, Ultra-Low Iq, Ultra-High PSRR, Ultra-Low Noise

For complete documentation, see the data sheet.

The NCV8163 is an LDO (Low Dropout Regulator) capable of supplying 250 mA output current. Designed to meet the requirements of RF and analog circuits, the NCV8163 device provides low noise, high PSRR, low quiescent current, and very good load/line transients. The device is designed to work with a 1 uF input and a 1 uF output ceramic capacitor.

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 V _{RMS})	10	10	6.5	8.5

Features

- Ultra Low Quiescent Current 12 μ A
- Very Low Dropout 80mV@250mA
- Ultra High PSRR 92dB at 1 kHz
- Ultra High PSRR 60dB at 100 kHz

Applications

- Automotive

Benefits

- Improved efficiency during light load conditions
- Low power dissipation at full load
- Excellent for noise sensitive device like Image Sensors
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End Products

- ADAS
- Image Sensor
- Radar / Lidar

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
NCV8163AMX120TBG	AEC Qualified	Active	Single	Positive	1.2	0.25	2.2	5.5		0.012	92	6.5	Yes	No	XDFN-4
	PPAP Capable														
	Pb-free														
	Halide free														
NCV8163AMX150TBG	AEC Qualified	Active	Single	Positive	1.5	0.25	2.2	5.5		0.012	92	6.5	Yes	No	XDFN-4
	PPAP Capable														
	Pb-free														
	Halide free														
NCV8163AMX180TBG	AEC Qualified	Active	Single	Positive	1.8	0.25	2.2	5.5	0.18	0.012	92	6.5	Yes	No	XDFN-4
	PPAP Capable														
	Pb-free														
	Halide free														
NCV8163AMX250TBG	AEC Qualified	Active	Single	Positive	2.5	0.25	2.2	5.5	0.11	0.012	92	6.5	Yes	No	XDFN-4
	PPAP Capable														
	Pb-free														
	Halide free														
NCV8163AMX270TBG	AEC Qualified	Active	Single	Positive	2.7	0.25	2.2	5.5	0.095	0.012	92	6.5	Yes	No	XDFN-4
	PPAP Capable														
	Pb-free														
	Halide free														
NCV8163AMX280TBG	AEC Qualified	Active	Single	Positive	2.8	0.25	2.2	5.5	0.095	0.012	92	6.5	Yes	No	XDFN-4
	PPAP Capable														
	Pb-free														
	Halide free														
NCV8163AMX300TBG	AEC Qualified	Active	Single	Positive	3	0.25	2.2	5.5	0.09	0.012	92	6.5	Yes	No	XDFN-4
	PPAP Capable														
	Pb-free														
	Halide free														
NCV8163AMX330TBG	AEC Qualified	Active	Single	Positive	3.3	0.25	2.2	5.5	0.08	0.012	92	6.5	Yes	No	XDFN-4
	PPAP Capable														
	Pb-free														
	Halide free														
NCV8163ASN120T1G	AEC Qualified	Active	Single	Positive	1.2	0.25	2.2	5.5		0.012	92	6.5	Yes	No	TSOP-5 / SOT-23-5
	PPAP Capable														
	Pb-free														
	Halide free														
NCV8163ASN180T1G	AEC Qualified	Active	Single	Positive	1.8	0.25	2.2	5.5	0.205	0.012	92	6.5	Yes	No	TSOP-5 / SOT-23-5
	PPAP Capable														
	Pb-free														
	Halide free														
NCV8163ASN250T1G	AEC Qualified	Product Preview	Single	Positive	2.5	0.25	2.2	5.5	0.13	0.012	92	6.5	Yes	No	TSOP-5 / SOT-23-5
	PPAP Capable														
	Pb-free														
	Halide free														

NCV8163ASN270T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.7	0.25	2.2	5.5	0.12	0.012	92	6.5	Yes	No	TSOP-5 / SOT-23-5
NCV8163ASN280T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.8	0.25	2.2	5.5	0.12	0.012	92	6.5	Yes	No	TSOP-5 / SOT-23-5
NCV8163ASN300T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3	0.25	2.2	5.5	0.115	0.012	92	6.5	Yes	No	TSOP-5 / SOT-23-5
NCV8163ASN330T1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.25	2.2	5.5	0.105	0.012	92	6.5	Yes	No	TSOP-5 / SOT-23-5
NCV8163ASN500T1G	AEC Qualified PPAP Capable Pb-free Halide free	Product Preview	Single	Positive	5	0.25	2.2	5.5	0.1	0.012	92	6.5	Yes	No	TSOP-5 / SOT-23-5
NCV8163BMX280TBG	AEC Qualified PPAP Capable Pb-free Halide free	Product Preview	Single	Positive	2.8	0.25	2.2	5.5	0.095	0.012	92	6.5	Yes	No	XDFN-4
NCV8163BSN180T1G	AEC Qualified PPAP Capable Pb-free Halide free	Product Preview	Single	Positive	1.8	0.25	2.2	5.5	0.205	0.012	92	6.5	Yes	No	TSOP-5 / SOT-23-5

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