

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 (μVRMS)	10	10	6.5	8.5

Features

- Ultra Low Quiescent Current 12 uA
- 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	Pricing (\$/Unit)	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)	PSR R (dB)	Noise (μV _{rms})	Enable	Power Good	Application	Package Type
NCV8163AMX120TBG	0.09	AEC Qualified	Active	Single	Positive	1.2	0.25	2.2	5.5		0.012	92	6.5	Yes	No	Automotive	XDF N-4
		PPAP Capable															
		Pb-free															
		Halide free															
NCV8163AMX150TBG	0.09	AEC Qualified	Active	Single	Positive	1.5	0.25	2.2	5.5		0.012	92	6.5	Yes	No	Automotive	XDF N-4
		PPAP Capable															
		Pb-free															
		Halide free															
NCV8163AMX180TBG	0.09	AEC Qualified	Active	Single	Positive	1.8	0.25	2.2	5.5	0.18	0.012	92	6.5	Yes	No	Automotive	XDF N-4
		PPAP Capable															
		Pb-free															
		Halide free															
NCV8163AMX250TBG	0.09	AEC Qualified	Active	Single	Positive	2.5	0.25	2.2	5.5	0.11	0.012	92	6.5	Yes	No	Automotive	XDF N-4
		PPAP Capable															
		Pb-free															
		Halide free															
NCV8163AMX270TBG	0.09	AEC Qualified	Active	Single	Positive	2.7	0.25	2.2	5.5	0.095	0.012	92	6.5	Yes	No	Automotive	XDF N-4
		PPAP Capable															
		Pb-free															
		Halide free															
NCV8163AMX280TBG	0.09	AEC Qualified	Active	Single	Positive	2.8	0.25	2.2	5.5	0.095	0.012	92	6.5	Yes	No	Automotive	XDF N-4
		PPAP Capable															
		Pb-free															
		Halide free															
NCV8163AMX300TBG	0.09	AEC Qualified	Active	Single	Positive	3	0.25	2.2	5.5	0.09	0.012	92	6.5	Yes	No	Automotive	XDF N-4
		PPAP Capable															
		Pb-free															
		Halide free															
NCV8163AMX330TBG	0.09	AEC Qualified	Active	Single	Positive	3.3	0.25	2.2	5.5	0.08	0.012	92	6.5	Yes	No	Automotive	XDF N-4
		PPAP Capable															
		Pb-free															
		Halide free															
NCV8163ASN120T1G	0.1564	AEC Qualified	Active	Single	Positive	1.2	0.25	2.2	5.5		0.012	92	6.5	Yes	No	Automotive	TSO P-5 / SOT-23-5
		PPAP Capable															
		Pb-free															
		Halide free															
NCV8163ASN180T1G	0.1564	AEC Qualified	Active	Single	Positive	1.8	0.25	2.2	5.5	0.205	0.012	92	6.5	Yes	No	Automotive	TSO P-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	Automotive	TSO P-5 / SOT-23-5
		PPAP Capable															
		Pb-free															
		Halide free															

NCV8163ASN270T1G	0.1564	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	Automotive	TSO P-5 / SOT-23-5
NCV8163ASN280T1G	0.1564	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	Automotive	TSO P-5 / SOT-23-5
NCV8163ASN300T1G	0.1564	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	Automotive	TSO P-5 / SOT-23-5
NCV8163ASN330T1G	0.1564	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	Automotive	TSO P-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	Automotive	TSO P-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	Automotive	XDF N-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	Automotive	TSO P-5 / SOT-23-5

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