

Product Overview

NCV8705: LDO Regulator, 500 mA, Low Dropout, Ultra-Low Iq, High PSRR, Ultra-Low Noise

For complete documentation, see the data sheet.

The NCV8705 is a low noise, low power consumption and low dropout Linear Voltage Regulator. With its excellent noise and PSRR specifications, the device is ideal for use in products utilizing RF receivers, imaging sensors, audio processors or any component requiring an extremely clean power supply. The NCV8705 uses an innovative Adaptive Ground Current circuit to ensure ultra low ground current during light load conditions.

Features

- Operating Input Voltage Range: 2.5 V to 5.5 V
- Ultra-Low Quiescent Current of Typ. 13 μ A
- Very Low Dropout: 230 mV Typical at 500 mA
- High PSRR: 71 dB at 1 kHz
- Available in Fixed Voltage Output Options: 0.8 V to 3.5 V
- Ultra-Low Noise: 12 μ Vrms from 100 Hz to 100 KHz
- AEC-Q100 Qualified and PPAP Capable
- Adjustable Operation from 0.8V

Applications

- ADAS, Infotainment & Cluster, and Telematics
- General Purpose Automotive
- Building & Factory Automation, Smart Meters
- General Industrial

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	Power Good	Package Type
NCV8705ML33TCG	0.3067	AEC Qualified	Active	Single	Positive	3.3	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	DFN W-8
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8705MT12TCG	0.4104	AEC Qualified	Active	Single	Positive	1.2	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	WDF N-6
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8705MT18TCG	0.4104	AEC Qualified	Active	Single	Positive	1.8	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	WDF N-6
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8705MT28TCG	0.4104	AEC Qualified	Active	Single	Positive	2.8	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	WDF N-6
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8705MT30TCG	0.4104	AEC Qualified	Active	Single	Positive	3	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	WDF N-6
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8705MT33TCG	0.4104	AEC Qualified	Active	Single	Positive	3.3	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	WDF N-6
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8705MTADJTCG	0.2765	AEC Qualified	Active	Single	Positive	Adj	0.5	2.5	5.5		0.013	71	12	Yes	No	WDF N-6
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8705MW12TCG	0.3467	AEC Qualified	Active	Single	Positive	1.2	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	DFN-8
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8705MW18TCG	0.3467	AEC Qualified	Active	Single	Positive	1.8	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	DFN-8
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8705MW28TCG	0.3467	AEC Qualified	Active	Single	Positive	2.8	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	DFN-8
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8705MW30TCG	0.3467	AEC Qualified	Active	Single	Positive	3	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	DFN-8
		PPAP Capable														
		Pb-free														
		Halide free														

NCV8705MW33TCG	0.3467	AEC Qualified	Active	Single	Positive	3.3	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	DFN-8
		PPAP Capable														
		Pb-free														
		Halide free														
NCV8705MWADJTCG	0.3467	AEC Qualified	Active	Single	Positive	Adj	0.5	2.5	5.5	0.23	0.013	71	12	Yes	No	DFN-8
		PPAP Capable														
		Pb-free														
		Halide free														

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

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