



Product Overview

NCV8705: 500 mA, Ultra-Low Iq, Ultra-Low Noise LDO Voltage Regulator

[For complete documentation, see the data sheet](#)

Product Description

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

- PDAs, Mobile Phones, GPS, Smartphones

Part Electrical Specifications

Product	Compliance	Status	Output	Polarity	V _O (V)	I _O Typ (A)	V _I Max (V)	V _{DO} Typ (V)	I _q Typ (mA)	PSRR (dB)	Noise (μV _{rms})	Package Type
NCV8705MT12TCG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.2	0.5	5.5		0.013	71	12	WDFN-6
NCV8705MT18TCG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.8	0.5	5.5		0.013	71	12	WDFN-6
NCV8705MT28TCG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.8	0.5	5.5	0.23	0.013	71	12	WDFN-6
NCV8705MT30TCG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3	0.5	5.5		0.013	71	12	WDFN-6
NCV8705MT33TCG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.5	5.5		0.013	71	12	WDFN-6
NCV8705MTADJTCG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	Adjustable	0.5	5.5		0.013	71		WDFN-6

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

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