

Product Overview

NCP105: LDO Regulator, 150 mA, High PSRR, High Accuracy

For complete documentation, see the data sheet.

The NCP105 is 150 mA LDO that provides a very stable, accurate voltage with low noise suitable for space constrained, noise sensitive applications. In order to optimize performance for battery operated portable applications, the NCP105 employs the dynamic quiescent current adjustment for very low IQ consumption at no-load. The NCP105 is offered in both a small XDFN-4 1 mmx1 mm, 0.4mm Thin package as well as in a standard TSOP5 package.

Features

- Operating Input Voltage Range: 1.7 V to 5.5 V
- Low Dropout: 125 mV Typical at 150 mA @ 2.8 V
- High PSRR 70dB at 1kHz
- Thermal Shutdown and Current Limit Protections
- Very Low Quiescent Current of Typ. 50 μ A
- Available in XDFN4 1.0 x 1.0 mm Package
- +/- 1% typical Vout Accuracy @25 °C
- Available in TSOP5 Package

Benefits

- Well suited for battery powered applications
- Supports applications with very low Input to Output Voltage requirements
- Well suited for noise sensitive applications
- Robust design and high reliability
- Suitable for battery powered applications
- Very well suited for space-constrained applications
- Precise Vout for power sensitive devices
- Well suited for applications where leaded package is preferred

Applications

- Touchscreen Controller Supply
- Wireless module
- Camera supply module
- MCU and low power FPGA supply
- IoT Battery Powered Wireless Sensor Nodes

End Products

- Smartphone
- Tablet
- Portable device
- Wireless handset
- IP Camera

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)	PSRR (dB)	Noise (μ V _{rms})	Enable	Power Good	Package Type
NCP105AMX100TCG	0.0287	Pb-free Halide free	Active	Single	Positive	1	0.15	1.7	5.5		0.05	70	70	Yes	No	XDFN-4
NCP105AMX120TCG	0.0287	Pb-free Halide free	Active	Single	Positive	1.2	0.15	1.7	5.5		0.05	70	70	Yes	No	XDFN-4
NCP105AMX180TBG	0.0287	Pb-free Halide free	Active	Single	Positive	1.8	0.15	1.7	5.5	0.22	0.05	70	70	Yes	No	XDFN-4
NCP105AMX180TCG	0.0287	Pb-free Halide free	Active	Single	Positive	1.8	0.15	1.7	5.5	0.22	0.05	70	70	Yes	No	XDFN-4
NCP105AMX250TCG	0.0287	Pb-free Halide free	Active	Single	Positive	2.5	0.15	1.7	5.5	0.14	0.05	70	70	Yes	No	XDFN-4
NCP105AMX280TCG	0.0287	Pb-free Halide free	Active	Single	Positive	2.8	0.15	1.7	5.5	0.125	0.05	70	70	Yes	No	XDFN-4
NCP105AMX300TCG	0.0287	Pb-free Halide free	Active	Single	Positive	3	0.15	1.7	5.5	0.11	0.05	70	70	Yes	No	XDFN-4
NCP105AMX330TCG	0.0287	Pb-free Halide free	Active	Single	Positive	3.3	0.15	1.7	5.5	0.105	0.05	70	70	Yes	No	XDFN-4
NCP105AMX345TCG	0.0287	Pb-free Halide free	Active	Single	Positive	3.45	0.15	1.7	5.5	0.1	0.05	70	70	Yes	No	XDFN-4

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

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