

Product Overview

NCP140: LDO Voltage Regulator, 150 mA, Capacitor Free, Low Noise

For complete documentation, see the data sheet.

The NCP140 is a 150 mA very low dropout regulator which offers excellent voltage accuracy and clean output voltage for power sensitive application. The NCP140 is very suitable for battery powered application due to very low quiescent current and virtually zero current at disable mode. This device is stable with or without output capacitors and allows minimize footprint and BOM. The XDFN4 package is optimized for use in space constrained applications.

Features

- Capless design
- Stable with any type of capacitor
- Operating Input Voltage Range: 1.6 V to 5.5 V
- Thermal Shutdown and Current Limit Protections
- +/- 1% typical Vout Accuracy
- Available in two XDFN4 packages

Benefits

- Save PCB area and cost
- Simple design
- Well suited for battery powered applications
- Robust design and high reliability
- Precise Vout for power sensitive devices
- Very well suited for space-constrained applications

Applications

- Camera supply module
- Wireless module
- Touchscreen Controller Supply
- Analog device supply

End Products

- Smartphones
- Tablets
- Portable Devices
- Wearables
- Wireless Headsets

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
NCP140AMXC180TCG	Pb-free Halide free	Active	Single	Positive	1.8	0.15	1.6	5.5	0.255	0.045	55	17	Yes	No	XDFN-4
NCP140AMXC280TCG	Pb-free Halide free	Active	Single	Positive	2.8	0.15	1.6	5.5	-	0.045	55	17	Yes	No	XDFN-4
NCP140AMXC300TCG	Pb-free Halide free	Active	Single	Positive	3	0.15	1.6	5.5	-	0.045	55	17	Yes	No	XDFN-4
NCP140AMXC330TCG	Pb-free Halide free	Active	Single	Positive	3.3	0.15	1.6	5.5	0.125	0.045	55	17	Yes	No	XDFN-4
NCP140AMXD180TCG	Pb-free Halide free	Active	Single	Positive	1.8	0.15	1.6	5.5	0.255	0.045	55	17	Yes	No	XDFN-4
NCP140AMXD280TCG	Pb-free Halide free	Active	Single	Positive	2.8	0.15	1.6	5.5	-	0.045	55	17	Yes	No	XDFN-4
NCP140AMXD300TCG	Pb-free Halide free	Active	Single	Positive	3	0.15	1.6	5.5	-	0.045	55	17	Yes	No	XDFN-4
NCP140AMXD330TCG	Pb-free Halide free	Active	Single	Positive	3.3	0.15	1.6	5.5	0.125	0.045	55	17	Yes	No	XDFN-4
NCP140BMXC330TCG	Pb-free Halide free	Active	Single	Positive	3.3	0.15	1.6	5.5	0.125	0.045	55	17	Yes	No	XDFN-4
NCP140BMXD330TCG	Pb-free Halide free	Active	Single	Positive	3.3	0.15	1.6	5.5	0.125	0.045	55	17	Yes	No	XDFN-4

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

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