

Product Overview

NCP718: LDO Regulator, 300 mA, Low I_q, Wide Input Voltage

For complete documentation, see the data sheet.

The NCP718 is 300 mA LDO Linear Voltage Regulator. It is a very stable and accurate device with ultra-low quiescent current consumption (typ. 4 μ A over the full temperature range) and a wide input voltage range (up to 24 V). The regulator incorporates several protection features such as Thermal Shutdown and Current Limiting.

Features

- Ultra-Low Quiescent Current typ. 4 μ A over Temperature
- Operating Input Voltage Range 2.5 V to 24 V
- Adjustable and Fixed Version Available
- High PSRR 60dB at 1kHz
- Noise typ. 36 μ V_{RMS} from 100 Hz to 100 kHz
- Stable with 1 μ F output capacitor
- Soft-start to Reduce Inrush Current and Overshoots
- SOA Limiting for High V_{in} / High I_{out} – Static and Dynamic

Benefits

- Improved efficiency during light load conditions
- Wide operating range, suitable for industrial
- Possibility to create any output voltage in range 1.2V to 5V
- Excellent for power sensitive device
- Very well suited for noise sensitive application
- Good stability with common and cheap capacitors
- Smooth and controlled output voltage raise
- Reliable operation under various condition

Applications

- NCP718 can be used for powering MCU and other IC
- Battery powered equipment
- Industrial power supplies
- Wireless routers
- Wireless charges

End Products

- Telecommunication : Zigbee, NB-IoT, Industrial : Smart Meter, Smart LED, Set-Top-Box, Medical : Equipment
- Wireless charges, routers
- Wearable electronics
- Sensor systems
- Battery powered applications

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 (μ V _{rms})	Enable	Power Good	Package Type
NCP718AMT250TBG	Pb-free Halide free	Product Preview	Single	Positive	2.5	0.3	2.5	24	0.3	0.004	60	75	Yes	No	WDFN-6
NCP718AMTADJTBG	Pb-free Halide free	NEW	Single	Positive	1.2-5.0 ADJ	0.3	2.5	24	-	0.004	60	36	Yes	No	WDFN-6
NCP718ASN120T1G	Pb-free Halide free	Product Preview	Single	Positive	1.2	0.3	2.5	24	1.3	0.004	60	36	Yes	No	TSOT-23-5
NCP718ASN150T1G	Pb-free Halide free	Product Preview	Single	Positive	1.5	0.3	2.5	24	1	0.004	60	45	Yes	No	TSOT-23-5
NCP718ASN180T1G	Pb-free Halide free	NEW	Single	Positive	1.8	0.3	2.5	24	0.7	0.004	60	48	Yes	No	TSOT-23-5
NCP718ASNADJT1G	Pb-free Halide free	NEW	Single	Positive	ADJ 1.2-5.0	0.3	2.5	24	-	0.004	60	36	Yes	No	TSOT-23-5
NCP718BMTADJTBG	Pb-free Halide free	Product Preview	Single	Positive	ADJ 1.2-5.0	0.3	2.5	24	-	0.004	60	36	Yes	No	WDFN-6
NCP718BSN180T1G	Pb-free Halide free	Product Preview	Single	Positive	1.8	0.3	2.5	24	0.7	0.004	60	48	Yes	No	TSOT-23-5
NCP718BSNADJT1G	Pb-free Halide free	Product Preview	Single	Positive	ADJ 1.2-5.0	0.3	2.5	24	-	0.004	60	36	Yes	No	TSOT-23-5

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