

## Product Overview

### NCP716: LDO Regulator, 80 mA, Ultra-Low Iq

For complete documentation, see the data sheet.

The NCP716 is 80 mA LDO Linear Voltage Regulator. It is a very stable and accurate device with ultra-low ground current consumption (4.7  $\mu$ A over the full output load range) and a wide input voltage range (up to 24 V).

The regulator incorporates several protection features such as Thermal Shutdown and Current Limiting, Short Circuit Protection. The NCP716 is an ideal choice for Portable Devices with Low Standby Current Requirements.

#### Similar Products:

	<a href="#">NCP715</a>	<a href="#">NCP716</a>	<a href="#">NCP716B</a>	<a href="#">NCP718</a>
Output Current (A)	0.05	0.08	0.15	0.30
PSRR f=1 kHz (dB)	52	60	53	52
Dropout Voltage (V)	0.230	0.310	0.600	0.275

#### Features

- Wide Input Voltage Range: Up to 24V
- Ultra-Low Quiescent current: 3.2 $\mu$ A Typical
- Fixed Output Voltage Options: from 1.2V to 5.0V
- Power Supply Rejection Ratio: 60dB @ 100kHz
- Package: 2mm x 2mm WDFN8

#### Applications

- Portable Equipment
- Communication Systems
- Consumer Electronics Devices
- Portable Medical Devices
- Power Supply Adapters

#### Benefits

- Compatible with most battery sources and DC output voltage adapters
- Helps to reduce the current consumption
- Very-well suited to power low supply voltage microcontrollers or sensors
- Provides very good input to output voltage isolation
- Offers very small overall solution size

#### End Products

- Notebook Adapters
- Wireless Charging Systems
- Smoke Sensors
- Battery Powered Power Tools
- Electronic Thermostats

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Output	Polarity	V <sub>O</sub> (V)	I <sub>O</sub> Typ (A)	V <sub>I</sub> Min (V)	V <sub>I</sub> Max (V)	V <sub>DO</sub> Typ (V)	I <sub>q</sub> Typ (mA)	PSRR (dB)	Noise ( $\mu$ V <sub>rms</sub> )	Enable	Power Good	Package Type
NCP716MT12TBG	0.1867	Pb-free Halide free	Active	Single	Positive	1.2	0.08	2.5	24	1.3	0.0032	60	100	No	No	WDFN-6
NCP716MT15TBG	0.1867	Pb-free Halide free	Active	Single	Positive	1.5	0.08	2.5	24	1	0.0032	60	120	No	No	WDFN-6
NCP716MT18TBG	0.1867	Pb-free Halide free	Active	Single	Positive	1.8	0.08	2.5	24	0.7	0.0032	60	140	No	No	WDFN-6
NCP716MT25TBG	0.1867	Pb-free Halide free	Active	Single	Positive	2.5	0.08	2.5	24	0.4	0.0032	60	160	No	No	WDFN-6
NCP716MT30TBG	0.1867	Pb-free Halide free	Active	Single	Positive	3	0.08	2.5	24	0.37	0.0032	60	170	No	No	WDFN-6
NCP716MT33TBG	0.1867	Pb-free Halide free	Active	Single	Positive	3.3	0.08	2.5	24	0.35	0.0032	60	170	No	No	WDFN-6
NCP716MT50TBG	0.1867	Pb-free Halide free	Active	Single	Positive	5	0.08	2.5	24	0.31	0.0032	60	180	No	No	WDFN-6
NCP716MTG50TBG	0.1867	Pb-free Halide free	Active	Single	Positive	5	0.08	2.5	24	0.31	0.0032	60	180	No	No	WDFN-6

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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