

Product Overview

NCP5663: LDO Regulator, 3 A, Low Noise, with Enable

For complete documentation, see the data sheet.

The NCP5663 is a high performance, low dropout (LDO) linear voltage regulator designed for high power applications that require up to 3.0 A current. It is offered in both fixed and adjustable output versions. With output voltages as low as 0.9 V and ultra-fast response times for load transients, the NCP5663 also provides additional features such as Enable and Error Flag (for the fixed output version), increasing the utility of this device. A thermally robust, 5 pin D2Pak, combined with an architecture that offers low ground current (independent of load), provides for a superior high-current LDO solution.

Features

- UltraFast Transient Response (Settling Time: 1 - 3 us)
- Low Noise Without Bypass Capacitor (28 uVrms)
- Low Ground Current Independent of Load (3.0 mA Maximum)
- Fixed/Adjustable Output Voltage Versions
- Enable Function
- Error Flag (Fixed Output Version)
- Current Limit Protection
- Thermal Protection
- 0.9 V Reference Voltage for UltraLow Output Operation
- Power Supply Rejection Ratio > 65 dB

For more features, see the data sheet

Applications

- Networking Equipment
- Servers
- Game Boxes
- Set Top Boxes

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) | PSR R (dB) | Noise (μV _{rms}) | Enable | PowerGood | Package Type |
|-----------------|-------------------|---|--------|--------|----------|--------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|------------|----------------------------|--------|-----------|----------------------|
| NCP5663DS15R4G | 0.8133 | Pb-free Halide free | Active | Single | Positive | 1.5 | 3 | 2 | 9 | 1 | 1.3 | 65 | 28 | Yes | Yes | D ² PAK-5 |
| NCP5663DS18G | 0.8133 | Pb-free Halide free | Active | Single | Positive | 1.8 | 3 | 2 | 9 | 1 | 1.3 | 65 | 28 | Yes | Yes | D ² PAK-5 |
| NCP5663DS18R4G | 0.8133 | Pb-free Halide free | Active | Single | Positive | 1.8 | 3 | 2 | 9 | 1 | 1.3 | 65 | 28 | Yes | Yes | D ² PAK-5 |
| NCP5663DSADJR4G | 0.8133 | Pb-free Halide free | Active | Single | Positive | Adj | 3 | 2 | 9 | 1 | 1.3 | 65 | 28 | Yes | No | D ² PAK-5 |
| NCV5663DS15R4G | 0.8418 | AEC Qualified PPAP Capable Pb-free Halide free | Active | Single | Positive | 1.5 | 3 | 2 | 9 | 1 | 1.3 | 65 | 28 | Yes | Yes | D ² PAK-5 |
| NCV5663DSADJR4G | 0.8418 | AEC Qualified PPAP Capable Pb-free Halide free | Active | Single | Positive | Adj | 3 | 2 | 9 | 1 | 1.3 | 65 | 28 | Yes | No | D ² PAK-5 |

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

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