

Product Overview

NCP5663: Linear Voltage Regulator, LDO, Fast Response, 3.0 A, with Enable

For complete documentation, see the data sheet

Product Description

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 μ s)
- Low Noise Without Bypass Capacitor (28 μ Vrms)
- 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

Applications

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

Part Electrical Specifications

Product	Compliance	Status	Output	Polarity	V _O (V)	I _O Typ (A)	V _I Max (V)	V _{DO} Typ (V)	I _q Typ (mA)	PSRR (dB)	Noise (μ V _{rms})	Package Type
NCP5663DS15R4G	Pb-free Halide free	Active	Single	Positive	1.5	3	9	1	1.3	65	28	D ² PAK-5
NCP5663DS18G	Pb-free Halide free	Active	Single	Positive	1.8	3	9	1	1.3	65	28	D ² PAK-5
NCP5663DS18R4G	Pb-free Halide free	Active	Single	Positive	1.8	3	9	1	1.3	65	28	D ² PAK-5
NCP5663DSADJR4G	Pb-free Halide free	Active	Single	Positive	Adjustable	3	9	1	1.3	65	28	D ² PAK-5
NCV5663DS15R4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.5	3	9	1	1.3	65	28	D ² PAK-5
NCV5663DSADJR4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	Adjustable	3	9	1	1.3	65	28	D ² PAK-5

