

## Product Overview

### NVMFS5C442NL: Single N-Channel Power MOSFET 40V, 130A, 2.5mΩ

For complete documentation, see the data sheet.

Automotive Power MOSFET in a 5x6mm flat lead package designed for compact and efficient designs and including high thermal performance. Wettable Flank Option available for Enhanced Optical Inspection. AEC-Q101 Qualified MOSFET and PPAP capable suitable for automotive applications.

#### Features

- Small Footprint (5x6 mm)
- Low RDS(on)
- Low QG and Capacitance
- NVMFS5C442NLWF - Wettable Flank Option
- AEC-Q101 Qualified and PPAP Capable
- RoHS Compliant

#### Benefits

- Compact Design
- Minimize Conduction Losses
- Minimize Driver Losses
- Enhanced Optical
- Automotive qualified

#### Applications

- Reverser Battery protection
- Power switches (High Side Driver, Low Side Driver, H-Bridges etc.)
- Switching power supplies

#### End Products

- Solenoid Driver – ABS, Fuel injection
- Motor Control – EPS, Wipers, Fans, Seats, etc.
- Load Switch – ECU, Chassis, Body

#### Part Electrical Specifications

Product	Compliance	Status	Chan- nel Polar- ity	Confi- gura- tion	V <sub>SS</sub> <sup>(BR)D</sup> Min (V)	V <sub>GS</sub> Max (V)	V <sub>GS(th)</sub> Max (V)	I <sub>D</sub> Max (A)	P <sub>D</sub> Max (W)	R <sub>DS(on)</sub> Max @ V <sub>GS</sub> = 2.5 V (mΩ)	R <sub>DS(on)</sub> Max @ V <sub>GS</sub> = 4.5 V (mΩ)	R <sub>DS(on)</sub> Max @ V <sub>GS</sub> = 10 V (mΩ)	Q <sub>g</sub> Typ @ V <sub>GS</sub> = 4.5 V (nC)	Q <sub>g</sub> Typ @ V <sub>GS</sub> = 10 V (nC)	C <sub>iss</sub> Typ (pF)	Pack- age Type
NVMFS5C442NLAFT1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	N- Chan- nel	Singl- e	40	±20	2	126	83	-	3.7	2.5	16	50	3100	SO- 8FL / DFN- 5
NVMFS5C442NLWFAFT 1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	N- Chan- nel	Singl- e	40	±20	2	126	83	-	3.7	2.5	16	50	3100	SO- 8FL / DFN- 5

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