

## Product Overview

### NVMFS5C456N: Single N-Channel Power MOSFET 40V, 80A, 4.5mΩ

For complete documentation, see the data sheet.

Automotive Power MOSFET in a 5 x 6 mm 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 (5 x 6 mm)
- Low  $R_{DS(on)}$
- Low  $Q_g$  and Capacitance
- Wettable Flank Option
- AEC-Q101 Qualified and PPAP Capable
- RoHS Compliant

#### Benefits

- Compact Design
- Minimize Conduction Losses
- Minimize Drive Losses
- Enhanced Optical Inspection
- Automotive Qualified

#### Applications

- Reverse 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	$V_{SS}$ Min (V)	$V_{GS}$ Max (V)	$V_{GS(th)}$ Max (V)	$I_D$ Max (A)	$P_D$ Max (W)	$R_{DS(on)}$ Max @ $V_{GS} =$ 2.5 V (mΩ)	$R_{DS(on)}$ Max @ $V_{GS} =$ 4.5 V (mΩ)	$R_{DS(on)}$ Max @ $V_{GS} =$ 10 V (mΩ)	$Q_g$ Typ @ $V_{GS} =$ 4.5 V (nC)	$Q_g$ Typ @ $V_{GS} =$ 10 V (nC)	$C_{iss}$ Typ (pF)	Pack- age Type
NVMFS5C456NT1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	N- Chan- nel	Singl- e	40	20	3.5	78	55	-	-	4.5	-	17	1150	SO- 8FL / DFN- 5
NVMFS5C456NWFT1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	N- Chan- nel	Singl- e	40	20	3.5	78	55	-	-	4.5	-	17	1150	SO- 8FL / DFN- 5

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

Created on: 9/19/2018