



Product Overview

NVMFS5C680NL: Power MOSFET, Single N-Channel, 60 V, 21 A, 27.5 mΩ

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

- Low $R_{DS(on)}$
- Low Q_G and Gate capacitance
- Industry standard 5 x 6 mm package Industry
- Best in-class FOM ($R_{DS(ON)} \times Q_G$)
- NVMFS5C680NLWF - Wettable Flanks Product
- AEC-Q101 Qualified and PPAP Capable
- RoHS Compliant

Benefits

- Minimize Conduction Losses
- Minimize Switching Losses
- Compact Design and Standard footprint for direct drop-in
- Increased efficiency, lower power dissipation
- Enhanced Optical Inspection

Applications

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

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	$V_{(BR)D}$ 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
NVMFS5C680NLT1G	AEC Qualified	Active	N- Chan- nel	Singl- e	60	20	2.2	21	24	-	43	27.5	2.9	5.8	330	SO- 8FL / DFN- 5
	PPAP Capable															
	Pb-free															
	Halide free															
NVMFS5C680NLWFT1G	AEC Qualified	Active	N- Chan- nel	Singl- e	60	20	2.2	21	24	-	43	27.5	2.9	5.8	330	SO- 8FL / DFN- 5
	PPAP Capable															
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For more information please contact your local sales support at www.onsemi.com.

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