



Product Overview

NVMFS5C646NL: Power MOSFET 60V, 93A, 4.7 mOhm, Single N-Channel, SO8-FL, Logic Level.

For complete documentation, see the data sheet

Product Description

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	Benefits
<ul style="list-style-type: none"> Low RDS(on) Low QG and Gate capacitance Industry standard 5x6mm package Industry Best in-class FOM (RDS(ON) x QG) 	<ul style="list-style-type: none"> Minimize Conduction Losses Minimize Switching Losses Compact Design and Standard footprint for direct drop-in Increased efficiency, lower power dissipation

Applications	End Products
<ul style="list-style-type: none"> Reverser Battery protection Switching power supplies Power switches (High Side Driver, Low Side Driver, H-Bridges etc.) 	<ul style="list-style-type: none"> Solenoid Driver – ABS, Fuel injection Motor Control – EPS, Wipers, Fans, Seats, etc. Load Switch – ECU, Chassis, Body

Part Electrical Specifications

Product	Compliance	Status	Channel Polarity	Configuration	V _{DS} (BR) 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 (m)	r _{DS(on)} Max @ V _{GS} = 4.5 V (m)	r _{DS(on)} Max @ V _{GS} = 10 V (m)	Q _g Typ @ V _{GS} = 4.5 V (nC)	Q _g Typ @ V _{GS} = 10 V (nC)	Q _{gd} Typ @ V _{GS} = 4.5 V (nC)	Q _{tr} Typ (nC)	C _{iss} Typ (pF)	C _{oss} Typ (pF)	C _{rss} Typ (pF)	Packaging Type
NVMFS5C646NLT1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	N-Channel	Single	60	16	2	93	79		6.3	4.7	15.7	33.7	5.1	32	2164	900	17	SO-8FL / DF N-5
NVMFS5C646NLT3G	AEC Qualified PPAP Capable Pb-free Halide free	Active	N-Channel	Single	60	16	2	93	79		6.3	4.7	15.7	33.7	5.1	32	2164	900	17	SO-8FL / DF N-5
NVMFS5C646NLWFT1G	AEC Qualified PPAP Capable Pb-free Halide free	Active	N-Channel	Single	60	16	2	93	79		6.3	4.7	15.7	33.7	5.1	32	2164	900	17	SO-8FL / DF N-5
NVMFS5C646NLWFT3G	AEC Qualified PPAP Capable Pb-free Halide free	Active	N-Channel	Single	60	16	2	93	79		6.3	4.7	15.7	33.7	5.1	32	2164	900	17	SO-8FL / DF N-5

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

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