New Product Introduction
OptiMOS™ 7 80 & 100 V in SSO8

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public

OptiMOS™ 7 80 & 100 V in SSO8

Package Description

SSO8 Single (TDSON-8)



L x W x H
6.5 x 5.1 x 1.0 mm³
I_{Dmax} (DC current) at Tj=25 °C: 175A
Cu-Clip soldered
Latest product family in production: **OptiMOS™ 7 80 V with BiC: 1.3mΩ** **OptiMOS™ 7 100 V with BiC: 2.1mΩ**

Application Examples

BLDC motor · Electric power steering · ABS · Zonal architecture · Power distribution · DC-DC · Relay box junction box

Key features	Key benefits
– Low on-resistance, RDS(on)	– Minimized conduction losses
– Industry's best on-resistance, RDS(on)	– Superior switching performance
– Fast switching times (turn on/off)	– High power efficiency
– Leading edge FOM (RDS(on) x Qg)	– Highest power density in 5x6mm package
– Low package resistance and inductance	– Increased design ruggedness
– High avalanche current capability	– Well-suited for parallel placement
– Tight threshold voltage, VGS(th), range	– High quality for Automotive applications
– Drain current improved 75 % over prior	
– Extended qualification beyond AEC-Q101	

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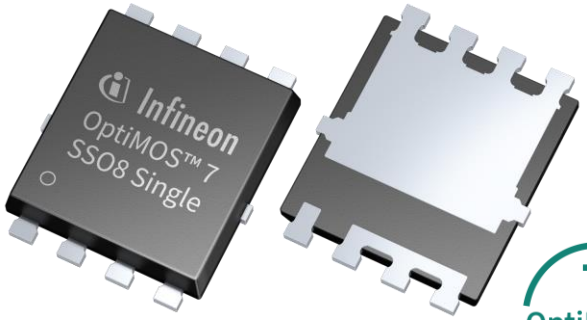
OptiMOS™ 7 80 & 100 V in SSO8

New Product Introduction

- Infineon introduces a portfolio of MOSFETs in our next, leading edge, power semiconductor technology; OptiMOS™ 7 80 & 100 V. These products are offered in a versatile, robust, high current SSO8 5x6 mm^2 SMD package.
- These MOSFETs are designed specifically for the high performance, high quality and robustness needed for demanding automotive applications.
- Another advantage is improved switching performance. The benefits are reduced switching losses and faster switching times. These packages are great fits for motor drive and power conversion circuit applications. The reduced switching losses, coupled with the reduced conduction losses, bring the benefit of high energy efficiency.

SSO8 5x6 mm^2



7 OptiMOS™ 40V

Product Name	Orderable Part Number (OPN)	V_{DS} [V]	$R_{DS(on)}$ max at V_{GS} 10V [mΩ]	Q_G typ. [nC]	R_{thJC} max. [K/W]	FOM [mΩ*nC]	I_D max. at 25°C [A]
IAUCN08S7N013	IAUCN08S7N013ATMA1	80	1.3	89	0.69	116	175
IAUCN08S7N019	IAUCN08S7N019ATMA1	80	1.9	63	0.89	120	175
IAUCN08S7N024	IAUCN08S7N024ATMA1	80	2.4	51.5	1.0	124	150
IAUCN08S7N034	IAUCN08S7N034ATMA1	80	3.4	35.2	1.3	120	120
IAUCN08S7L110	IAUCN08S7L110ATMA1	80	11.0	14.8	2.6	163	40
IAUCN10S7N021	IAUCN10S7N021ATMA1	100	2.1	81	0.69	170	175
IAUCN10S7N040	IAUCN10S7N040ATMA1	100	4.0	39.3	1.06	157	120
IAUCN10S7N074	IAUCN10S7N074ATMA1	100	7.4	21.4	1.56	158	78
IAUCN10S7L180	IAUCN10S7L180ATMA1	100	18.0	11.0	2.6	198	39

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