

New Product Introduction
OptiMOS™ 7 40 V in S3O8

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public

OptiMOS™ 7 40 V in S3O8

Package Description

S3O8 (TSDSON-8)



L x W x H

3.3 x 3.3 x 1.0 mm³

I_{Dmax} (DC current) at Tj=25 °C:
60A

Cu-Clip soldered

Latest product family in production:
OptiMOS™ 7 with BiC: 1.33mΩ

Application Examples

Power lift gate | Electric power steering | Window lift | Water pump | BLDC motor | Electric parking brake | Power seat | Body control module

Key features

- Very small package footprint
- Latest OptiMOS™ 7 40 V for optimized switching & power losses
- Advanced leadless package with Cu-Clip for low package Ron and min. stray inductance
- High avalanche capability and SOA ruggedness
- 50% $R_{DS(on)}$ reduction versus previous generation (BiC product)

Key benefits

- Highest power and current density
- High thermal capacity lead-frame package
- Reduced conduction losses
- Optimized switching behavior
- Reduced form factor compared to traditional leaded packages
- JEDEC Industry standard package PG-TSDSON-8

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New Product Introduction

- Infineon is extending its Automotive Package MOSFET technology generation – OptiMOS™ 7 40 V in industry standard S3O8 3x3 mm^2 (PG-TSDSON-8) power packages for robust automotive application.
- The S3O8 package offers Cu-clip connection with 60A current capability.
- In combination with Infineon's leading OptiMOS™ 7 40 V Power MOSFET technology, it offers highest power density and energy efficiency at the industry's lowest on-state resistance on a 3x3 mm^2 footprint.
- The package provides reduced switching losses, improved SOA ruggedness, and high avalanche current capability to facilitate highly efficient system design for tomorrow's automotive applications.

S3O8 3x3 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]
IAUZN04S7N013	IAUZN04S7N013ATMA2	40	1.33	37	1.6	49.21	60
IAUZN04S7N020	IAUZN04S7N020ATMA2	40	1.96	29	1.8	56.84	60
IAUZN04S7N026	IAUZN04S7N026ATMA1	40	2.64	19	2.3	50.16	60
IAUZN04S7L046	IAUZN04S7L046ATMA1	40	4.59	12	3.3	55.08	60
IAUZN04S7N049	IAUZN04S7N049ATMA1	40	4.93	10	3.3	49.3	60

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