

## ISC027N10NM6ATMA1

Data Sheet

Manufacturers <u>Infineon Technologies Corporation</u>

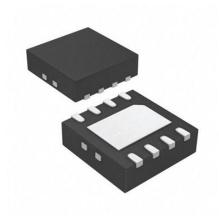
Package/Case

PG-TDSON-8

Product Type

**RoHS** 

Lifecycle



Images are for reference only

Please submit RFQ for ISC027N10NM6ATMA1 or <u>Email to us: sales@ovaga.com</u> We will contact you in 12 hours.

**RFQ** 

## **General Description**

ISC027N10NM6 OptiMOS<sup>TM</sup> 6 100 V in normal level is setting the new technology standard in the field of discrete power MOSFETs. Compared to alternative products, Infineon's leading thin wafer technology is enabling significant performance benefits.

Infineon's OptiMOS<sup>TM</sup> 6 industrial power MOSFET 100 V is designed for high switching frequency application such as telecom and server power supply, but also the ideal choice for other applications such as solar, power tools and drones.

In SuperSO8 package it achieves  $\sim$ 20% improvements in on-state resistance ( $R_{DS(on)}$ ) and 30% better figure of merits (FOM -  $R_{DS(on)}$  x  $Q_g$  and  $Q_{gd}$ ) compared to the previous technology OptiMOS<sup>TM</sup> 5. This enables designers to increase efficiency, allowing easier thermal design and less paralleling, leading to system cost reduction.

Compared to OptiMOS<sup>TM</sup> 5, the new technology achieves:

~20% lower R<sub>DS(on)</sub>

30% improved  $FOM_g$  and 40% better  $FOM_{gd}$ 

Lower and softer reverse recovery charge (Q<sub>rr</sub>)

Ideal for high switching frequency

MSL 1 classified according to J-STD-020

175 °C junction temperature rating

High avalanche energy rating

Pb-free lead plating

RoHS compliant

| Low conduction losses       |
|-----------------------------|
| Low switching losses        |
| Fast turn on and off        |
| Less paralleling required   |
| Robust reliable performance |
| Environmentally friendly    |
| Less paralleling required   |
| Telecom                     |
| Server                      |
| Drones                      |
| Robotics                    |
| Solar                       |
| Power tools                 |
| Battery management system   |
|                             |
|                             |
|                             |
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|                             |
|                             |

# **Features** DS(on) 30% improved FOM g gd Lower and softer reverse recovery charge (Q rr Ideal for high switching frequency MSL 1 classified according to J-STD-020 175 °C junction temperature rating High avalanche energy rating Pb-free lead plating RoHS compliant Low conduction losses Low switching losses Fast turn on and off

## **Application**

Telecom

Server

Drones

Robotics

Solar

Power tools

Battery management system

## **Related Products**

Less paralleling required

Environmentally friendly

Less paralleling required

Robust reliable performance



#### ISC022N10NM6ATMA1

Infineon Technologies Corporation PG-TSON-8



#### **ISZ0703NLSATMA1**

Infineon Technologies Corporation PG-TSDSON-8



#### ISC011N06LM5ATMA1

Infineon Technologies Corporation PG-TDSON-8



#### ISC058N04NM5

Infineon Technologies Corporation



#### SISS50DN-T1-GE3

Infineon Technologies Corporation



## ISP12DP06NM

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#### ISC012N04LM6

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## ISC017N04NM5ATMA1

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