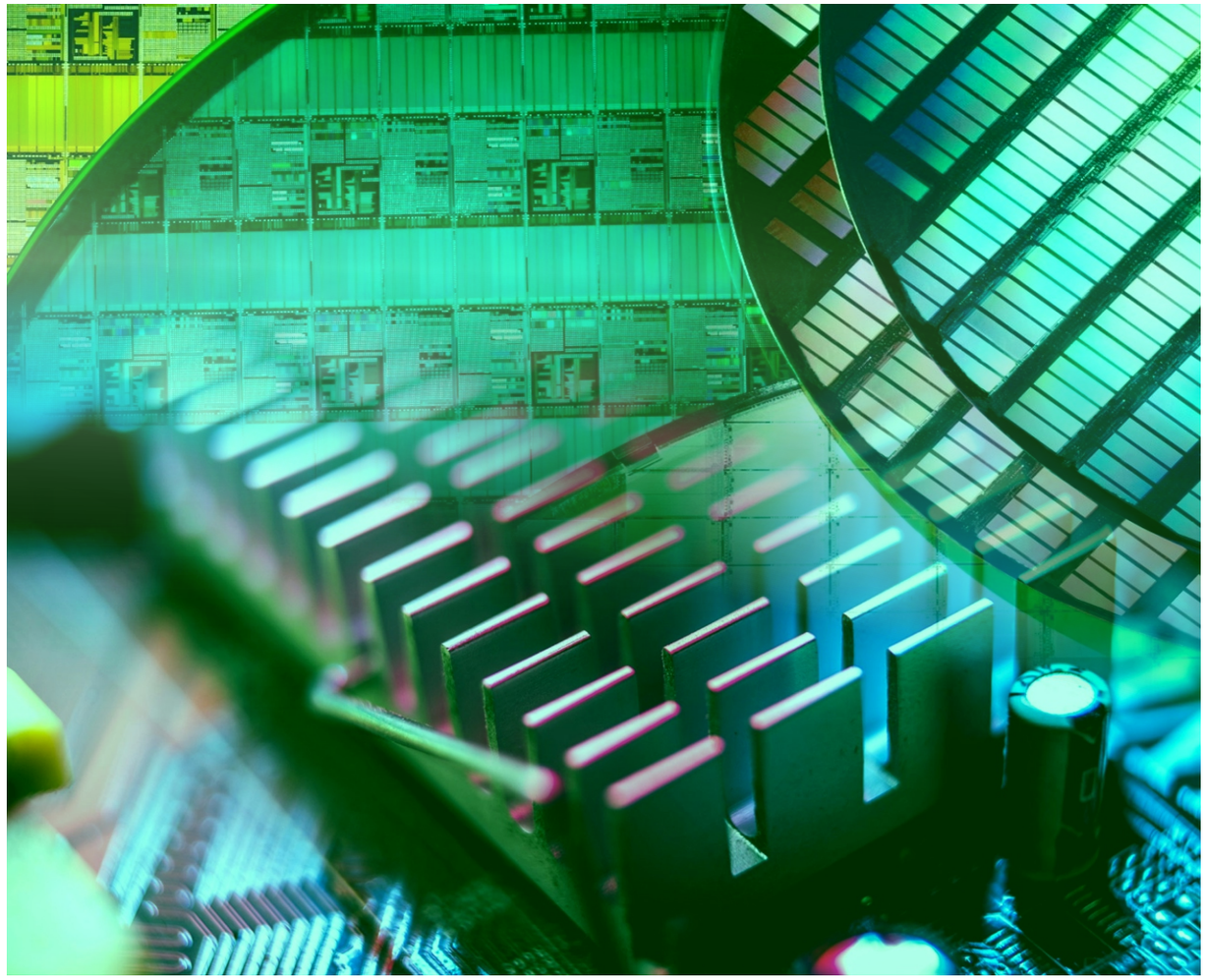
扫描关注
“美浦森半导体”

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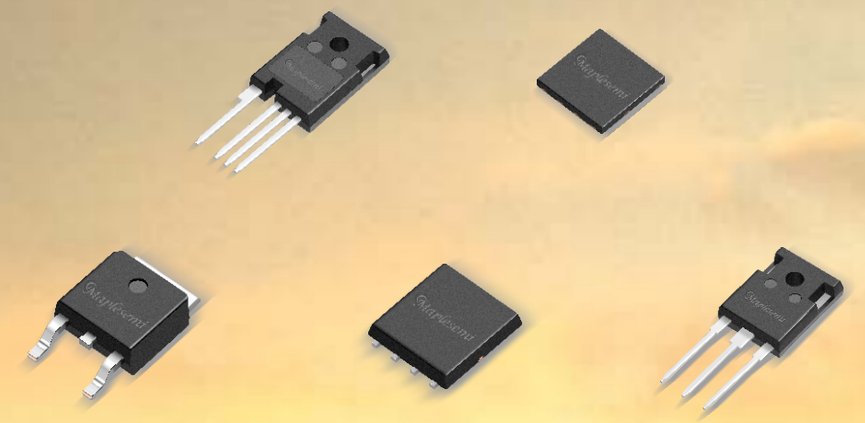
Maplesemi
美浦森半导体
Maple Semiconductor

# 产品选型手册
# Product Selection Manual
2022.11

## 用领先的行业技术,创造出性价比最高的产品,服务于我们的客户

我们在功率半导体的设计、开发和批量生产方面树立了新的榜样(Power MOSFET、Super Junction Power MOSFET、SiC Diode、SiC MOSFET、FRD、IGBT)并将客户服务作为首要任务，努力成为行业标杆企业，为客户创造最大价值。



## 产品应用领域

- **5G通信 PC电源**
  通讯电源 基站电源系统 电脑铂金电源 矿机电源
- **LED照明 工业电源 汽车电子**
  LED照明 LED显示屏电源 工控电源 逆变电源 UPS 新能源等
- **PD 快充，适配器**
  PD 电源 手机充电器 笔记本适配器
- **BMS BLDC**
  锂电保护板 直流风扇 伺服电机 电动工具 无人机 智能机器人等
- **消费类电子**
  移动电源 无线充 电子烟 蓝牙耳机 手持移动设备等

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## 公司简介 (Company Profile)

深圳市美浦森半导体有限公司 2014年成立，总部位于深圳，是一家专业功率半导体元器件设计公司。公司产品包括中大功率场效应管( 高中低压全系列产品, Trench MOSFET/SGT MOSFET /Super Junction MOSFET / Planar MOSFET), SiC 二极管、SiC MOSFET等系列产品。

美浦森半导体在深圳/上海设有研发中心，主要研发人员在产品研发和生产制程方面都具有丰富的行业经验，平均行业经验在15年以上。在深圳建立有半导体功率器件测试和应用实验室，主要负责产品的设计验证、参数测试、可靠性验证、系统分析、失效分析等，承担美浦森产品的研发质量验证。目前，美浦森半导体MOSFET和碳化硅系列产品在LED电源、PD电源、PC和服务器电源、光伏逆变、UPS、充电桩、智能家居、BLDC、BMS、小家电等领域得到广泛应用。

创新 高效 热爱 持续是美浦森半导体的核心价值; 用创新实现突破，是公司不断前进的动力源泉。专业于MOSFET器件领域的拓展，运用创新的电路设计和国际同步的研发技术，成功研发出新一代MOSFET系列产品，产品相关性能达到行业领先水平。我们始终坚持不断创新、不断突破，始终保持产品第一、技术第一、服务第一的行业领先地位，全心全意做好产品的开发与用户的极限体验 。

## 公司发展历程

**2019–2020**

碳化硅全系6寸生产线升级结束, 碳化硅MOS正式批量接单
中低压Trench/SGT MOS批量出货.

**2017–2018**

超结MOS E7系列产品开始批量出货, RSP参数超越竞品系列产品;
成立深圳器件测试及可靠性实验室、产品应用实验室.

**2015–2016**

650V SiCDIODE系列产品面市推广, 并大批量出货;
1200V SiCDIODE研发成功, 进入批量阶段;
碳化硅MOS验证成功.

**2014**

2014年深圳市美浦森半导体有限公司成立,
同年正式推广"美浦森"品牌MOS系列产品.



## 功率器件实验室&应用实验室

投资2000万人民币兴建器件分析实验室和应用实验室, 负责美浦森产品的设计验证, 品质监控和客户的技术支持。
2022年"美浦森实验室"将扩充至800平方, 并正在申请国家CNAS认证实验室资格。

1. 产品设计验证\产品性能比对\动静态参数测试\极限参数测试
2. 可靠性验证\失效分析\产品品质监控
3. 系统应用分析\系统性能验证

KEYENCE显微镜

KEYSIGHT功率器件分析仪

TEKTRONIX功率器件动态测试仪

JUNO直流参数测试系统

ISPEC高温反偏实验系统

STATEC测试系统

## 高压MOSFET（VDMOS）

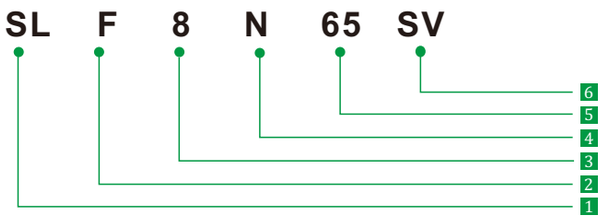
| Products | PKG | BVdss[V] | ID(A) | RDS(ON)[Ω] | | VTH[V] | Application |
|---|---|---|---|---|---|---|---|
| | | | | Typ | Max | | |
| SLP32N20C | TO-220F/263 | 200 | 32 | 0.08 | 0.10 | 2.0 ~ 4.0 | Inverter |
| SLP3103 | TO-220P/F/H | 260 | 38 | 0.12 | 0.16 | | |
| SLF740UZ | TO-220F | 430 | 11 | 0.53 | 0.64 | | |
| SLF750U | TO-252/220F | 430 | 11 | 0.54 | 0.64 | | SwitchingPower |
| SLD5N50S2 | TO-252/220F | 500 | 5 | 1.32 | 1.6 | 2.0 ~ 4.0 | Ballast<br>Switching Power<br>LCD Power<br>PC Power<br>LED Power |
| SLD850U | TO-263/252/220/220F | | 9 | 0.80 | 0.90 | | |
| SLF13N50A | TO-220/220F | | 13 | 0.42 | 0.52 | | |
| SLF13N50U | TO-220/220F | | 13 | 0.4 | 0.48 | | |
| SLF13N50C | TO-220/220F | | 13 | 0.4 | 0.48 | | |
| SLF16N50S | TO-220/220F/3P | | 16 | 0.32 | 0.4 | | |
| SLF16N50C | TO-220/220F/3P | | 16 | 0.3 | 0.38 | 3.0 ~ 5.0 | |
| SLF18N50A | TO-220F | | 18 | 0.25 | 0.35 | | |
| SLF18N50S | TO-220F/3P | | 18 | 0.23 | 0.32 | | |
| SLF18N50C | TO-220F/3P | | 18 | 0.23 | 0.32 | | |
| SLF20N50A | TO-220F | | 20 | 0.23 | 0.27 | | |
| SLF20N50S | TO-220F/3P | | 20 | 0.21 | 0.26 | | |
| SLF20N50C | TO-220F/3P | | 20 | 0.21 | 0.26 | | |
| SLF25N50U | TO-3P | | 25 | 0.2 | 0.23 | 2.0 ~ 4.0 | |
| SLF30N50U | TO-220F/3P | | 30 | 0.14 | 0.16 | | |
| SLH40N50U | TO-3P/247 | | 40 | 0.08 | 0.1 | | |
| SLH50N50U | TO-3P/247 | | 50 | 0.07 | 0.09 | | |
| SLF2N60S | TO-251/252/220F | 600 | 2 | 4 | 5 | 2.0 ~ 4.0 | LED Power<br>Switching Power<br>LCD Power<br>Charger<br>Adapter<br>PC Power |
| SLF5N60SV | TO-251/252/220F | | 4.5 | 1.9 | 2.5 | | |
| SLF8N60SV | TO-220/220F | | 7.5 | 1 | 1.2 | | |
| SLF10N60SV | TO-220/220F | | 10 | 0.75 | 0.87 | | |
| SLF12N60C | TO-220/220F | | 12 | 0.51 | 0.61 | | |
| SLF14N60S | TO-220/220F | | 14 | 0.43 | 0.53 | | |
| SLF16N60S | TO-220/220F | | 16 | 0.35 | 0.45 | 3.0 ~ 5.0 | |
| SLF18N60S | TO-220F | | 18 | 0.31 | 0.41 | | |
| SLF20N60S | TO-220F | | 20 | 0.29 | 0.37 | | |
| SLD2N65S | TO-251/252/220F | 650 | 2 | 4.3 | 5.3 | 2.0 ~ 4.0 | LED Power<br>LCD Power<br>Charger<br>Adapter<br>Switching Power |
| SLF5N65SV | TO-251/252/220F | | 4.5 | 2.1 | 2.6 | | |
| SLF5N65C | TO-220/220F | | 5 | 2.3 | 3 | | |
| SLF7N65SV | TO-220/220F/252 | | 7.5 | 1.2 | 1.5 | | |
| SLF10N65A | TO-220/220F | | 10 | 0.82 | 0.97 | | |
| SLF10N65C | TO-263/220F/220 | | 10 | 0.68 | 0.81 | | |
| SLF12N65SV | TO-263/220F/220 | | 12 | 0.62 | 0.75 | | |
| SLF12N65C | TO-263/220F/220 | | 12 | 0.6 | 0.75 | | |



## 高压MOSFET（VDMOS）

| Products | PKG | BVdss[V] | ID(A) | RDS(ON)[Ω] | | VTH[V] | Application |
|---|---|---|---|---|---|---|---|
| | | | | Typ | Max | | |
| SLF14N65S | TO-220F/220 | 650 | 14 | 0.51 | 0.66 | 2.0 ~ 4.0 | LED Power<br>LCD Power<br>Charger<br>Adapter<br>Switching Power |
| SLF16N65S | TO-220F/220 | | 16 | 0.41 | 0.51 | 3.0 ~ 5.0 | |
| SLF18N65S | TO-220F | | 18 | 0.38 | 0.48 | 3.0 ~ 5.0 | |
| SLF20N65S | TO-220F | | 20 | 0.35 | 0.44 | 3.0 ~ 5.0 | |
| SLF20N65U | TO-220F/220 | | 20 | 0.38 | 0.44 | 3.0 ~ 5.0 | |
| SLF4N70S | TO-220F | 700 | 4 | 2.3 | 3.0 | 2.0 ~ 4.0 | Charger<br>Adapter<br>Switching Power |
| SLF7N70S | TO-252/220F | | 7 | 1.3 | 1.6 | 2.0 ~ 4.0 | |
| SLF10N70S | TO-252/220F | | 10 | 0.90 | 1.15 | 2.0 ~ 4.0 | |
| SLF12N70S | TO-220F | | 12 | 0.72 | 0.8 | 2.0 ~ 4.0 | |
| SLF7N80C | TO-220/220F | 800 | 7 | 1.20 | 1.9 | 3.0 ~ 5.0 | Switching Power |
| SLW9N90C | TO-220F/3P | 900 | 9 | 1 | 1.4 | 2.0 ~ 4.0 | Electric welding |
| SLH3N150U | TO-3P/247 | 1500 | 3 | 5 | 6.5 | 3.0 ~ 5.0 | Auxiliary Power |

## 高压MOSFET命名方式




1 公司简称

2 封装形式

P：TO-220
F：TO-220F
H:TO-247
W:TO-3P
D:D-Pak(TO-252)
U:I-Pak(TO-251)
B:D2-Pak(TO-263)
I:I2-Pak(TO-262)

3 额定电流

4 沟道极性

N:N-channel
P:P-channel

5 电压系数(x10)

6 芯片工艺

C:MOS C-FET
U:MOS U-FET
S:MOS S-FET
UZ:MOS U-FET+ESD
(Z: Zener diode)

## 超结MOSFET（SJMOS）

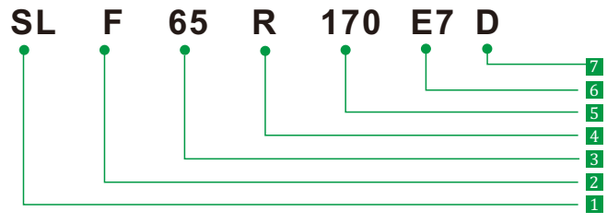
| Products | PKG | BVdss[V] | ID(A) | RDS(ON) [Ω](Max) | VTH[V] | Application |
|---|---|---|---|---|---|---|
| SLF60R380E7 | TO-220F | 600 | 11 | 0.38 | 2.5~4.5 | PV Inverter Power<br>Charging Pile Power<br>Solar Inverter<br>Wind Turbine<br>OBC |
| SLF60R280E7 | TO-220F | | 15 | 0.28 | 2.5~4.5 | |
| SLT60R190E7D | PTO-252 | | 20 | 0.19 | 2.5~4.5 | |
| SLL60R190E7D | DFN 8x8 | | 20 | 0.19 | 2.5~4.5 | |
| SLH60R190E7D | TO-247 | | 20 | 0.19 | 2.5~4.5 | |
| SLF60R180E7D | TO-220F | | 20 | 0.18 | 2.5~4.5 | |
| SLF60R105E7D | TO-220F | | 38 | 0.105 | 2.5~4.5 | |
| SLP60R105E7D | TO-220 | | 38 | 0.105 | 2.5~4.5 | |
| SLB60R105E7D | TO-263 | | 38 | 0.105 | 2.5~4.5 | |
| SLL60R105E7D | DFN8x8 | | 38 | 0.105 | 2.5~4.5 | |
| SLP60R105E7D | TO-220 | | 38 | 0.105 | 2.5~4.5 | |
| SLF60R090E7 | TO-220F | | 38 | 0.09 | 2.5~4.5 | |
| SLW60R090E7 | TO-3P | | 38 | 0.09 | 2.5~4.5 | |
| SLH60R090E7 | TO-247 | | 38 | 0.09 | 2.5~4.5 | |
| SLF60R075E7D | TO-220F | | 50 | 0.075 | 2.5~4.5 | |
| SLP60R075E7D | TO-220 | | 50 | 0.075 | 2.5~4.5 | |
| SLH60R075E7D | TO-247 | | 50 | 0.075 | 2.5~4.5 | |
| SLF60R065E7 | TO-220F | | 50 | 0.065 | 2.5~4.5 | |
| SLW60R065E7 | TO-3P | | 50 | 0.065 | 2.5~4.5 | |
| SLH60R065E7 | TO-247 | | 50 | 0.065 | 2.5~4.5 | |
| SLH60R043E7D | TO-247 | | 70 | 0.043 | 2.5~4.5 | OBC/Server power |
| SLH60R040E7 | TO-247 | | 70 | 0.04 | 2.5~4.5 | |
| SLH60R030E7D | TO-247 | | 80 | 0.03 | 2.5~4.5 | |
| SLH60R028E7 | TO-247 | | 80 | 0.028 | 2.5~4.5 | |
| SLD65R1K2E7 | TO-252/220F | 650 | 4 | 1.20 | 2.0~4.0 | TV Power<br>LED Power<br>Charger Power<br>Adapter Power<br>Switching Power |
| SLD65R1K1E7 | TO-252/220F | | 5 | 1.10 | 2.0~4.0 | |
| SLD65R600E7 | TO-252/220F | | 8 | 0.60 | 2.5~4.5 | |
| SLE65R600E7 | SOT-223-2L | | 8 | 0.60 | 2.5~4.5 | |
| SLM65R380E7 | DFN5x6 | | 11 | 0.38 | 2.5~4.5 | |
| SLD65R380E7 | TO-252 | | 11 | 0.38 | 2.5~4.5 | |
| SLF65R380E7 | TO-220F | | 11 | 0.38 | 2.5~4.5 | |
| SLD65R280E7 | TO-252 | | 15 | 0.28 | 2.0~4.0 | |
| SLF65R280E7 | TO-220F | | 15 | 0.28 | 2.5~4.5 | |
| SLT65R180E7 | PTO-252 | | 22 | 0.18 | 2.5~4.5 | |
| SLL65R170E7 | DFN8x8 | | 22 | 0.17 | 2.5~4.5 | |
| SLF65R170E7 | TO-220F | | 22 | 0.17 | 2.5~4.5 | |
| SLH65R170E7 | TO-247 | | 22 | 0.17 | 2.5~4.5 | Charger Power<br>Switching Power |
| SLD70R600E7 | TO-252 | 700 | 7 | 0.70 | 2.0~4.0 | |
| SLF70R600E7 | TO-252 | | 7 | 0.70 | 2.0~4.0 | |
| SLD70R380E7 | TO-252 | | 12 | 0.42 | 2.0~4.0 | |



## 超结MOSFET（SJMOS）

| Products | PKG | BVdss[V] | ID(A) | RDS(ON) [Ω](Max) | VTH[V] | Application |
|---|---|---|---|---|---|---|
| SLF70R380E7 | TO-220F | 700 | 12 | 0.42 | 2.0~4.0 | Charger Power<br>Switching Power |
| SLD70R280E7 | TO-252 | | 15 | 1.30 | 2.5~4.5 | |
| SLF70R280E7 | TO-220F | | 15 | 0.36 | 2.0~4.0 | |
| SLF70R190E7 | TO-220F | | 20 | 0.19 | 2.0~4.0 | |
| SLD80R850SJ | TO-252/220F | 800 | 7 | 0.85 | 2.5~4.5 | TV Power<br>Charger Power<br>Adapter Power<br>Switching Power |
| SLD80R500SJ | TO-252/220F | | 11 | 0.50 | 2.5~4.5 | |
| SLF80R380SJ | TO-220F | | 15 | 0.38 | 2.5~4.5 | |
| SLF80R290S2 | TO-220F | | 17 | 0.29 | 2.0~4.0 | |
| SLF80R240SJ | TO-220F/247 | | 20 | 0.24 | 2.5~4.5 | |

## 超结MOSFET命名方式




1 公司简称

2 封装形式

P：TO-220　F：TO-220F　H:TO-247
W:TO-3P　D:D-Pak(TO-252)
U:I-Pak(TO-251)
B:D2-Pak(TO-263)
I :I2-Pak(TO-262)
L：DFN8X8

3 额定电压

4 Rds(on)缩写

5 Rds(on)数值
单位：mΩ

6 芯片工艺

SJ:MOS SJ-FET
E7:MOS E7-FET
E7D:MOS FRD

7 快恢复二极管(FRD)

### 超结产品特点

- Trr时间缩短: 反向恢复时间快
- Qg电荷小: 开关速度快，开关损耗小
- Rds(on)值小: 通态阻抗小，通态损耗小
- PKG体积小: 同等功率规格下封装小，有利于功率密度的提高

## 中低压MOSFET（MV/LV MOS）

| Products | PKG | Polarity | Bvdss [v] | $I_D$ (A) | $V_{GS}$ (V) | $V_{TH}$ (V) | $R_{DS(ON)}$ (mΩ) @$V_{GS}$=10v | | $R_{DS(ON)}$ (mΩ) @$V_{GS}$=4.5v | | $R_{DS(ON)}$ (mΩ) @$V_{GS}$=2.5v | | Application |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Typ | Max | Typ | Max | Typ | Max | |
| SLV2302A | SOT-23 | N | 20 | 4.3 | ±12 | 0.7 | / | / | 19 | 27 | 26 | 38 | Load Switching |
| SLV2302T | SOT-23 | N | 20 | 4 | ±12 | 0.7 | / | / | 21.5 | 30 | 28.5 | 40 | |
| SLV2302B | SOT-23 | N | 20 | 3.5 | ±12 | 0.7 | / | / | 34.5 | 45 | 46 | 57 | |
| SLV2302C | SOT-23 | N | 20 | 3 | ±12 | 0.7 | / | / | 50 | 70 | 72 | 90 | |
| SLV2312T | SOT-23 | N | 20 | 7 | ±12 | 0.7 | / | / | 13.5 | 18 | 17 | 23 | Battery Protection |
| SLV2305T | SOT-23 | N | -20 | -5 | ±12 | -0.65 | / | / | 32 | 42 | 42 | 60 | |
| SLV8205A | SOT23-6 | DUAL-N | 20 | 5 | ±12 | 0.7 | / | / | 18.5 | 25 | 26 | 34 | |
| SLT8205A | TSSOP8 | DUAL-N | 20 | 5 | ±12 | 0.7 | / | / | 19 | 25 | 22 | 35 | |
| SLN50P02T | DFN3x3 | P | -20 | -50 | ±12 | -0.65 | / | / | 5.2 | 7.5 | 6.5 | 9 | E-Tool /BMS / Motor driver |
| SLD40N02T | TO-252 | N | 20 | 40 | ±12 | 0.7 | / | / | 7.5 | 12 | 11.5 | 18 | |
| SLD60N02T | TO-252 | N | 20 | 60 | ±12 | 0.7 | / | / | 4.6 | 6.0 | 5.6 | 7.5 | |
| SLM60N02T | DFN5x6 | N | 20 | 60 | ±12 | 0.7 | / | / | 4.5 | 6.0 | 5.4 | 7.2 | |
| SLD90N02T | TO-252 | N | 20 | 90 | ±12 | 0.7 | / | / | 2.8 | 4 | 4.0 | 6.0 | |
| SLD120N02T | TO-252 | N | 20 | 120 | ±12 | 0.7 | / | / | 2.1 | 2.8 | 2.8 | 3.5 | |
| SLM90N02T | DFN5x6 | N | 20 | 90 | ±12 | 0.7 | / | / | 2.8 | 4 | 4.0 | 5.0 | Load Swithching |
| SLV3400T | SOT-23 | N | 30 | 5.6 | ±12 | 0.8 | 20 | 25 | 22 | 45 | / | / | |
| SLV3404T | SOT-23 | N | 30 | 5.6 | ±20 | 1.5 | 17.5 | 24 | 24 | 38 | / | / | load Switching BMS |
| SLV2304T | SOT-23 | N | 30 | 3.6 | ±20 | 1.5 | 26 | 35 | 39 | 53 | / | / | |
| SLV3402T | SOT-23 | N | 30 | 3 | ±12 | 0.9 | 35 | 44 | 38 | 48 | / | / | |
| SLV3402C | SOT-23 | N | 30 | 2 | ±12 | 0.9 | 90 | 113 | 115 | 144 | / | / | |
| SLV3406T | SOT-23 | N | 30 | 4 | ±20 | 1.6 | 29.5 | 39 | 44 | 59 | / | / | |
| SLN30N03T | DFN3x3 | N | 30 | 30 | ±20 | 1.5 | 6.0 | 8.0 | 9.5 | 14 | / | / | |
| SLN30D03T | DFN3x3 | DUAL-N | 30 | 30 | ±20 | 1.5 | 6.0 | 8.0 | 9.5 | 14 | / | / | BLDC Inverter |
| SLD40N03T | TO-252 | N | 30 | 40 | ±20 | 1.6 | 6.0 | 8.5 | 11 | 15 | / | / | |
| SLV3401T | SOT-23 | P | -30 | -4.2 | ±12 | -0.8 | 44 | 55 | 54 | 68 | / | / | |
| SLV3407T | SOT-23 | P | -30 | -4.2 | ±20 | -1.6 | 40 | 50 | 58 | 73 | / | / | |
| SLN30P03T | DFN3x3 | P | -30 | -35 | ±20 | -1.5 | 8.0 | 11 | 13 | 16.5 | / | / | |
| SLS30L03A | SOP-8 | P | -30 | -30 | ±20 | -1.5 | 25.5 | 34 | 36.5 | 46 | / | / | |
| | | N | 30 | 30 | ±20 | 1.5 | 10.5 | 13 | 14.5 | 20 | / | / | BLDC BMS |
| SLD30L03A | TO-252-4 | P | -30 | -30 | ±20 | -1.5 | 23 | 34 | 34.5 | 46 | / | / | E-Tool BMS Inverter Load Switching |
| | | N | 30 | 30 | ±20 | 1.5 | 9.0 | 13 | 13.0 | 20 | / | / | |
| SLS50P03T | SOP-8 | P | -30 | -50 | ±25 | -1.5 | 8 | 10.5 | 12 | 16 | / | / | |
| SLM60P03T | DFN5x6 | P | -30 | -60 | ±20 | -1.5 | 5.5 | 7 | 8.3 | 10 | / | / | |
| SLN60P03T | DFN3x3 | P | -30 | -60 | ±20 | -1.5 | 5.8 | 7.3 | 8.5 | 11 | / | / | |
| SLD80N03T | TO-252 | N | 30 | 80 | ±20 | 1.5 | 4.8 | 5.5 | 7.5 | 11 | / | / | |
| SLP90N03A | TO-220 | N | 30 | 90 | ±20 | 1.5 | 4.5 | 5.5 | 6.5 | 8 | / | / | |
| SLD90N03T | TO-252 | N | 30 | 90 | ±20 | 1.5 | 3.2 | 4.5 | 5.2 | 7 | / | / | |
| SLD100N03T | TO-252 | N | 30 | 100 | ±20 | 1.5 | 2.8 | 4 | 4.6 | 6.5 | / | / | |
| SLN80N03T | DFN3x3 | N | 30 | 80 | ±20 | 1.5 | 4.5 | 5.0 | 6.5 | 10 | / | / | |



## 中低压MOSFET（MV/LV MOS）

| Products | PKG | Polarity | Bvdss [v] | $I_D$ (A) | $V_{GS}$ (V) | $V_{TH}$ (V) | $R_{DS(ON)}$ (mΩ) @$V_{GS}$=10v | | $R_{DS(ON)}$ (mΩ) @$V_{GS}$=4.5v | | $R_{DS(ON)}$ (mΩ) @$V_{GS}$=2.5v | | Application |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Typ | Max | Typ | Max | Typ | Max | |
| SLN90N03T | DFN3x3 | N | 30 | 90 | ±20 | 1.5 | 3.2 | 4.3 | 5.5 | 6.8 | / | / | DC-DC/ LED/ E-tool |
| SLM80N03T | DFN5x6 | N | 30 | 80 | ±20 | 1.5 | 4.5 | 5.0 | 6.5 | 10 | / | / | |
| SLM90N03T | DFN5x6 | N | 30 | 90 | ±20 | 1.5 | 3.0 | 4 | 5 | 6.5 | / | / | BLDC BMS Load Switching Inverters |
| SLM100N03T | DFN5x6 | N | 30 | 100 | ±20 | 1.5 | 2.8 | 4 | 5 | 6.5 | / | / | |
| SLS100N03T | SOP-8 | N | 30 | 100 | ±20 | 1.5 | 2.8 | 4 | 4.6 | 6.5 | / | / | |
| SLD120N03T | TO-252 | N | 30 | 120 | ±20 | 1.5 | 2.3 | 3.3 | 4.1 | 5.8 | / | / | |
| SLM120N03G | DFN5x6 | N | 30 | 120 | ±20 | 1.5 | 1.15 | 1.5 | 1.5 | 2.2 | / | / | |
| SLM120N03T | DFN5x6 | N | 30 | 120 | ±20 | 1.5 | 3.1 | 4 | 4 | 5.6 | / | / | |
| SLM160N03T | DFN5x6 | N | 30 | 160 | ±20 | 1.6 | 1.5 | 2.0 | 2.2 | 3 | / | / | BLDC PC POWER |
| SLD15N04T | TO-252 | N | 40 | 15 | ±20 | 1.5 | 18 | 24 | 27 | 45 | / | / | |
| SLD60N04T | TO-252 | N | 40 | 60 | ±20 | 1.7 | 5.5 | 7 | 9 | 12 | / | / | |
| SLM60N04T | DFN5x6 | N | 40 | 60 | ±20 | 1.7 | 5.2 | 6.8 | 8.6 | 11 | / | / | BLDC DC-DC |
| SLD80N40T | TO-252 | N | 40 | 80 | ±20 | 1.6 | 4.2 | 5.5 | 6.5 | 10 | / | / | |
| SLM80N04T | DFN5x6 | N | 40 | 80 | ±20 | 1.6 | 5.0 | 6.5 | 6.5 | 10 | / | / | |
| SLD130N04T | TO-252 | N | 40 | 130 | ±20 | 1.5 | 2.2 | 3.3 | 3.2 | 4.6 | / | / | |
| SLN40N04G | DFN3x3 | N | 40 | 40 | ±20 | 1.6 | 6.0 | 6.5 | 9 | 10.5 | / | / | BLDC BMS DC-DC Inverters |
| SLM150N04G | DFN5x6 | N | 40 | 150 | ±20 | 1.7 | 1.6 | 1.8 | 2 | 3.3 | / | / | |
| SLM160N04G | DFN5x6 | N | 40 | 160 | ±20 | 1.7 | 1.1 | 1.3 | 1.6 | 1.8 | / | / | |
| SLD15P04T | TO-252 | P | -40 | -15 | ±20 | -1.6 | 26.5 | 33.5 | 33 | 43 | / | / | |
| SLN40P04T | DFN3x3 | P | -40 | -40 | ±20 | -1.5 | 10.5 | 13.5 | 14 | 17.5 | / | / | |
| SLS40P04T | SOP-8 | P | -40 | -40 | ±20 | -1.5 | 10.5 | 13.5 | 14 | 17.5 | / | / | |
| SLD20N06T | TO-252 | N | 60 | 20 | ±20 | 1.5 | 24 | 29 | 28 | 30 | / | / | |
| SLS20D06T | SOP-8 | DUAL-N | 60 | 20 | ±20 | 1.5 | 22.5 | 30 | 28 | 39 | / | / | |
| SLD50N06T | TO-252 | N | 60 | 50 | ±20 | 1.7 | 14 | 16 | 17 | 25 | / | / | |
| SLM50N06T | DFN5x6 | N | 60 | 50 | ±20 | 1.7 | 14 | 15.5 | 16 | 25 | / | / | |
| SLP50N06T | TO-220 | N | 60 | 50 | ±20 | 1.7 | 14 | 17 | 16 | 25 | / | / | |
| SLD80N06T | TO-252 | N | 60 | 80 | ±20 | 3 | 6.1 | 8.5 | / | / | / | / | Load Swithcing LED |
| SLM80N06T | DFN5x6 | N | 60 | 80 | ±20 | 3 | 6.1 | 8.5 | / | / | / | / | |
| SLP120N06T | TO-220 | N | 60 | 120 | ±20 | 3 | 4.3 | 6.7 | / | / | / | / | |
| SLB150N06T | TO-263 | N | 60 | 150 | ±20 | 3 | 2.7 | 3.3 | 2.7 | 3.3 | / | / | |
| SLP150N06T | TO-220 | N | 60 | 150 | ±20 | 3 | 2.8 | 3.5 | 2.8 | 3.5 | / | / | |
| SLM150N06G | DFN5x6 | N | 60 | 150 | ±20 | 1.7 | 1.8 | 2.6 | / | / | / | / | DC-DC Inverter |
| SLP150N06G | TO-220 | N | 60 | 150 | ±20 | 1.7 | 2.4 | 3 | / | / | / | / | |
| SLD80P06T | TO-252 | P | -60 | -80 | ±20 | -1.6 | 16.5 | 19.5 | 18.5 | 22 | / | / | BLDC BMS DC-DC PD |
| SLB120N08G3 | TO-263 | N | 85 | 120 | ±20 | 3 | 4.5 | 5.5 | / | / | / | / | |
| SLP120N08G3 | TO-220 | N | 85 | 120 | ±20 | 3 | 4.5 | 5.5 | / | / | / | / | |
| SLD15N10T | TO-252 | N | 100 | 15 | ±20 | 1.7 | 95 | 110 | 100 | 130 | / | / | |
| SLD25N10T | TO-252 | N | 100 | 25 | ±20 | 1.5 | 40 | 50 | 45 | 50 | / | / | |

## 中低压MOSFET（MV/LV MOS）

| Products | PKG | Polarity | Bvdss [v] | $I_D$ (A) | $V_{GS}$ (V) | $V_{TH}$ (V) | $R_{DS(ON)}$ (mΩ) @$V_{GS}$=10v | | $R_{DS(ON)}$ (mΩ) @$V_{GS}$=4.5v | | $R_{DS(ON)}$ (mΩ) @$V_{GS}$=2.5v | | Application |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Typ | Max | Typ | Max | Typ | Max | |
| SLP25N10T | TO-220 | N | 100 | 25 | ±20 | 1.5 | 40 | 50 | 45 | 55 | / | / | |
| SLD30N10T | TO-252 | N | 100 | 30 | ±20 | 3 | 30 | 38 | / | / | / | / | Load, Switching, Led |
| SLP30N10T | TO-220 | N | 100 | 30 | ±20 | 3 | 30 | 38 | / | / | / | / | BLDC, Inverters |
| SLD40N10G | TO-252 | N | 100 | 40 | ±20 | 1.8 | 12.5 | 15 | 17 | 20 | / | / | |
| SLM40N10G | DFN5x6 | N | 100 | 40 | ±20 | 1.8 | 12 | 14 | 15 | 19 | / | / | |
| SLD90N10G | TO-252 | N | 100 | 90 | ±20 | 1.5 | 6.8 | 8 | 7.8 | 11.4 | / | / | BLDC<br>PD<br>BMS<br>DC-DC |
| SLM90N10G | DFN5x6 | N | 100 | 90 | ±20 | 1.5 | 6.4 | 7.7 | 8 | 10.5 | / | / | |
| SLM100N10G | DFN5x6 | N | 100 | 100 | ±20 | 2 | 6.2 | 7.5 | 6.5 | 8 | / | / | |
| SLP160N10G | TO-220 | N | 100 | 160 | ±25 | 3 | 3.7 | 4.2 | / | / | / | / | |
| SLB160N10G | TO-263 | N | 100 | 160 | ±25 | 3 | 3.7 | 4.2 | / | / | / | / | |
| SLD9N20T | TO-252 | N | 200 | 9 | ±30 | 1.5 | 220 | 330 | / | / | / | / | Load, Switching, Led |

## 中低压命名方式

SL P 100 N 20 T K

7 6 5 4 3 2 1

**1** 公司简称

**2** 封装形式
P:TO-220 F:TO-220F
H:TO-247 W:TO-3P
D:D-Pak(TO-252)
U:I-Pak(TO-251)
B:D2-Pak(TO-263)
I :I2-Pak(TO-262)
S:SOP-8 T:TSSOP-8
M:DFN5X6 N:DFN3X3
L:DFN8X8
V:SOT-23

**3** MOSFET电流值
（1-3位数字）

**4** 沟通极性
N:N-Nchannel
P:P-channel
L:N-channel+P-channel
D:Dual N-channel
E:Dual P-channel

**5** MOSFET电压值
（2-3位数字）

**6** 芯片工艺
T:普通Trench MOSFET
G:Split Gate Trench MOSFET

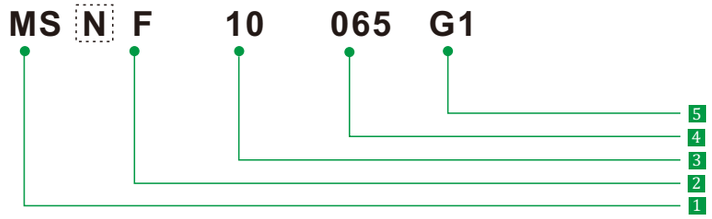
**7** 版本号
只有一个版本时此为空，
带ESD产品此位为K



## 碳化硅二极管（SiC Diode）

| Products | PKG | VR[V] | IF[A] | VF[V] (TYP) | Tj[°C] | Application |
|---|---|---|---|---|---|---|
| MSD02065G1 | TO-252-2Lead | 650 | 2 | 1.4 | 175 | LED Power<br>PFC Power<br>Inverter Power<br>Gold medal Power<br>Ultra-high Power<br>UPS Power<br>OBC Powerd<br>PD Power |
| MSP02065G1 | TO-220-2Lead | | 2 | 1.4 | | |
| MS7S02065G1 | SO-7 | | 2 | 1.4 | | |
| MSD04065G1 | TO-252-2Lead | | 4 | 1.4 | | |
| MSM04065G1 | DFN5x6 | | 4 | 1.4 | | |
| MSP04065G1 | TO-220-2Lead | | 4 | 1.4 | | |
| MSM06065G1 | DFN5x6 | | 6 | 1.4 | | |
| MSL06065G1 | DFN8x8 | | 6 | 1.4 | | |
| MSD06065G1 | TO-252 | | 6 | 1.4 | | |
| MSP06065G1 | TO-220-2Lead | | 6 | 1.4 | | |
| MSNP06065G1 | TO-220-2Lead | | 6 | 1.45 | | |
| MSP08065G1 | TO-220-2Lead | | 8 | 1.4 | | |
| MSNP08065G1 | TO-220-2Lead | | 8 | 1.45 | | |
| MSP10065G1 | TO-220-2Lead | | 10 | 1.4 | | |
| MSP10065G1S | TO-220-2Lead | | 10 | 1.4 | | |
| MSNP10065G1 | TO-220-2Lead | | 10 | 1.45 | | |
| MSP16065G1 | TO-220-2Lead | | 16 | 1.4 | | |
| MSP20065G1 | TO-220-2Lead | | 20 | 1.4 | | |
| MS2H20065G1 | TO-247-2Lead | | 20 | 1.4 | | |
| MS2H32065G1 | TO-247-3Lead | | 32 | 1.4 | | |
| MS2H40065G1 | TO-247-3Lead | | 40 | 1.4 | | |
| MS2TH60065G1 | TO-247-2Lead | | 60 | 1.4 | | |
| MSD02120G1 | TO-252 | 1200 | 2 | 1.45 | | PVInverter Power<br>Charging Pile Power<br>Solar Inverter<br>Wind Turbine<br>Motor Controller |
| MSD05120G1 | TO-252 | | 5 | 1.45 | | |
| MSD10120G1 | TO-252 | | 10 | 1.45 | | |
| MSP10120G1 | TO-220-2Lead | | 10 | 1.45 | | |
| MSF10120G1 | TO-220F-2Lead | | 10 | 1.45 | | |
| MSH16120G1 | TO-247-2Lead | | 16 | 1.45 | | |
| MSH20120G1 | TO-247-2Lead | | 20 | 1.45 | | |
| MS2H20120G1 | TO-247-3Lead | | 20 | 1.45 | | |
| MS2H32120G1 | TO-247-3Lead | | 32 | 1.45 | | |
| MS2TH32120G1 | TO-247-2Lead | | 32 | 1.45 | | |
| MS2H40120G1 | TO-247-3Lead | | 40 | 1.45 | | |
| MSH12120G1 | TO-247-2Lead | 1700 | 12 | 1.45 | | |
| MSH20170G1 | TO-247-2Lead | | 20 | 1.45 | | |

## 碳化硅二极管命名方式




**1** 公司简称

**2** 封装形式

**1:2Pin**

P:TO-220 F:TO-220F
H:TO-247 L:DFN8X8
D:D-Pak(TO-252)
U:I-Pak(TO-251)
B:D2-Pak(TO-263)
M:DFN5x6
7S: SO-7
N: 内绝缘工艺

**2:3Pin 2Chip**

2P:TO-220
2F:TO-220F 2H:TO-247
2B:D2-Pak 2I:I2-Pak

**3:2Pin 2Chip**

2TP:TO-220
2TW:TO-3P
2TH: TO-247

**4:3Pin 1Chip**

R:TO-220
RF:TO-220F RH:TO-247

**3** 额定电流

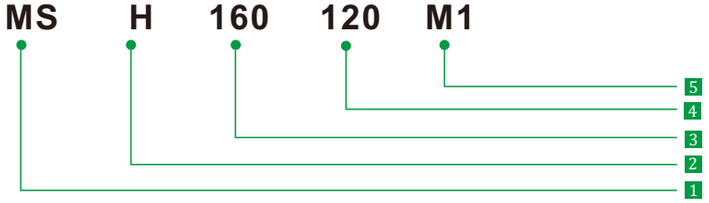
**4** 电压系数(X10)

**5** 芯片工艺
V1:JBS G1: MPS

## 碳化硅MOSFET(SiC MOS)

| Products | PKG | BVDSS [V] | ID[A] | RDS(ON) [R](TYP) | VTH[V] | Application |
|---|---|---|---|---|---|---|
| MSH060065M1 | TO-247-3Lead | 650 | 30 | 0.06 | 1.8~3.5 | PV Inverter Power<br>Solar Inverter<br>Wind Turbine |
| MSK060065M1 | TO-247-4Lead | | 30 | 0.06 | | |
| MSH035065M1 | TO-247-3Lead | | 70 | 0.035 | | |
| MSH160120M1 | TO-247-3Lead | 1200 | 17 | 0.16 | | |
| MSK160120M1 | TO-247-4Lead | | 17 | 0.16 | | |
| MSH080120M1 | TO-247-3Lead | | 28 | 0.08 | | |
| MSK080120M1 | TO-247-4Lead | | 28 | 0.08 | | |
| MSH040120M1 | TO-247-3Lead | | 60 | 0.04 | | |
| MSK040120M1 | TO-247-4Lead | | 60 | 0.04 | | |
| MSH025120M1 | TO-247-3Lead | | 80 | 0.025 | | |
| MSK025120M1 | TO-247-4Lead | | 80 | 0.025 | | |
| MSB7100170M1 | TO-263-7Lead | 1700 | 5 | 1.0 | | Solar Inverter |
| MSH100170M1 | TO-247-3Lead | | 5 | 1.0 | | |
| MSH045170M1 | TO-247-3Lead | | 40 | 0.045 | | |

## 碳化硅MOSFET命名方式




**1** 公司简称

**2** 封装形式

P:TO-220 F:TO-220F H:TO-247-3L
W:TO-3P D:D-Pak(TO-252)
U:I-Pak(TO-251)
B:D2-Pak(TO-263)
I : I2-Pak(TO-262)
K: TO-247-4L

**3** Rds(on)数值 单位: mΩ

**4** 电压系数(X10)

**5** 芯片工艺

### 碳化硅材料特点

- 开关时间快，开关损耗小
- 恢复时间短，Trr恢复时间短，趋近于零
- 工作结温高，工作温度可达到175°C以上
- 击穿电压高，产品电压最高可达6000W以上