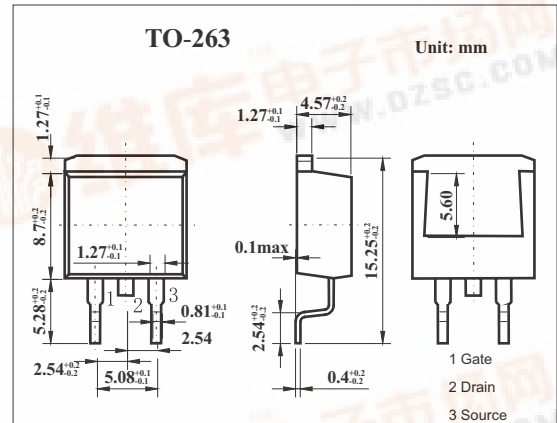


SMD Type MOSFET

N-Channel Enhancement Mode MOSFET
2SK3269

Features

- 4.5 V drive available
- Low on-state resistance
RDS(on)1 = 12 mΩ MAX. (VGS = 10 V, ID = 18 A)
- Low gate charge
QG = 30 nC TYP. (ID = 35 A, VDD = 16 V, VGS = 10 V)
- Built-in gate protection diode
- Surface mount device available



Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit | |
|-------------------------|-------------------|-----------------------|------|---|
| Drain to source voltage | V _{DSS} | 100 | V | |
| Gate to source voltage | V _{GSS} | ±20 | V | |
| Drain current | I _D | ±35 | A | |
| | I _{DP} * | ±140 | A | |
| Power dissipation | P _D | T _a =25 °C | 1.5 | W |
| | | T _c =25 °C | 40 | |
| Channel temperature | T _{ch} | 150 | °C | |
| Storage temperature | T _{stg} | -55 to +150 | °C | |

* PW ≤ 10 μ s, Duty Cycle ≤ 1%

Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|-------------------------------------|----------------------|--|-----|------|-----|------|
| Drain source surrender voltage | V _{DSS} | I _D =1mA, V _{GS} =0 | 100 | | | V |
| Drain cut-off current | I _{DSS} | V _{DS} =20V, V _{GS} =0 | | | 10 | μ A |
| Gate leakage current | I _{GSS} | V _{GS} =±20V, V _{DS} =0 | | | ±10 | μ A |
| Gate cutoff voltage | V _{GS(off)} | V _{DS} =10V, I _D =1mA | 1.0 | | 2.5 | V |
| Forward transfer admittance | Y _{fs} | V _{DS} =10V, I _D =12A | 9.0 | | | S |
| Drain to source on-state resistance | R _{Ds(on)} | V _{GS} =10V, I _D =18A | | 8.5 | 12 | mΩ |
| | | V _{GS} =4.5V, I _D =18A | | 12 | 19 | mΩ |
| Input capacitance | C _{iss} | V _{DS} =10V, V _{GS} =0, f=1MHZ | | 1300 | | pF |
| Output capacitance | C _{oss} | | | 570 | | pF |
| Reverse transfer capacitance | C _{rss} | | | 300 | | pF |
| Turn-on delay time | t _{on} | | | | 70 | |
| Rise time | t _r | I _D =18A, V _{GS(on)} =10V, R _G =10Ω, V _{DD} =10V | | 1220 | | ns |
| Turn-off delay time | t _{off} | | | 100 | | ns |
| Fall time | t _f | | | 180 | | ns |

