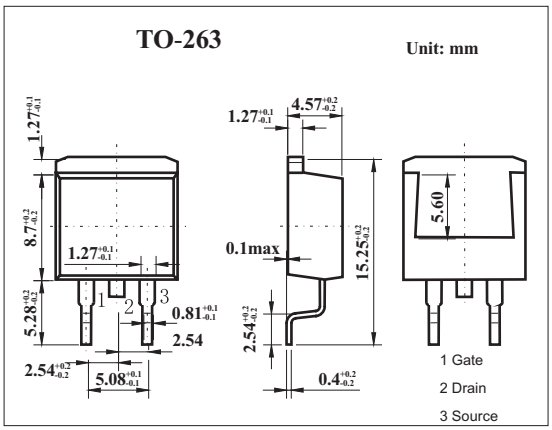
# N-Channel Enhacement Mode MOSFET
# 2SK3269




## ■ Features

- 4.5 V drive available
- Low on-state resistance

  $R_{DS(on)1}$ = 12 mΩ MAX. ($V_{GS}$ = 10 V, $I_D$ = 18 A)
- Low gate charge

  $Q_G$ = 30 nC TYP. ($I_D$ = 35 A, $V_{DD}$ = 16 V, $V_{GS}$ = 10 V)
- Built-in gate protection diode
- Surface mount device available

## ■ Absolute Maximum Ratings Ta = 25℃

| 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 Ta=25 ℃<br>Tc=25℃ | $P_D$ | 1.5<br>40 | W |
| Channel temperature | $T_{ch}$ | 150 | ℃ |
| Storage temperature | $T_{stg}$ | -55 to +150 | ℃ |

* PW≤10 μ s,Duty Cycle≤1%

## ■ Electrical Characteristics Ta = 25℃

| Parameter | Symbol | Testconditons | 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 |
| Gat 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 | $t_{on}$ | $I_D$=18A,$V_{GS(on)}$=10V,RG=10 Ω ,$V_{DD}$=10V | | 70 | | ns |
| Rise time | $t_r$ | | | 1220 | | ns |
| Turn-off delay time | $t_{off}$ | | | 100 | | ns |
| Fall time | tf | | | 180 | | ns |