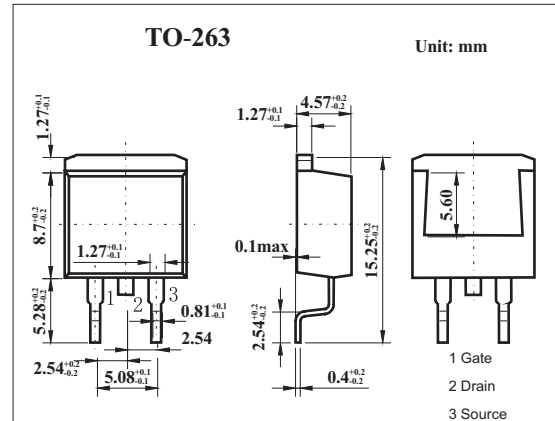


MOS Field Effect Transistor 2SK3322

■ Features

- Low gate charge
Q_G = 15 nC TYP. (V_{DD} = 450V, V_{GS} = 10 V, I_D = 5.5A)
- Gate voltage rating ±30 V
- Low on-state resistance
R_{DS(on)} = 2.2 Ω MAX. (V_{GS} = 10 V, I_D = 2.8A)
- Avalanche capability ratings



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|-------------------------|-------------------|----------------------|------|
| Drain to source voltage | V _{DSS} | 600 | V |
| Gate to source voltage | V _{GSS} | ±30 | V |
| Drain current | I _D | ±5.5 | A |
| | I _{DP} * | ±20 | A |
| Power dissipation | P _D | T _A =25°C | 1.5 |
| | | T _C =25°C | 65 |
| Channel temperature | T _{ch} | 150 | °C |
| Storage temperature | T _{stg} | -55 to +150 | °C |

* PW ≤ 10 μs, Duty Cycle ≤ 1%

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit | |
|-------------------------------------|----------------------|--|-----|-----|-----|------|----|
| Drain cut-off current | I _{DSS} | V _{DS} =600V, V _{GS} =0 | | | 100 | μA | |
| Gate leakage current | I _{GSS} | V _{GS} =±30V, V _{DS} =0 | | | ±10 | μA | |
| Gate cutoff voltage | V _{GS(off)} | V _{DS} =10V, I _D =1mA | 2.5 | | 3.5 | V | |
| Forward transfer admittance | Y _{fs} | V _{DS} =10V, I _D =2.8A | 1.0 | | | S | |
| Drain to source on-state resistance | R _{DS(on)} | V _{GS} =10V, I _D =2.8A | | 1.7 | 2.2 | Ω | |
| Input capacitance | C _{iss} | V _{DS} =10V, V _{GS} =0, f=1MHz | | 550 | | pF | |
| Output capacitance | C _{oss} | | | | 115 | | pF |
| Reverse transfer capacitance | C _{rss} | | | | 13 | | pF |
| Turn-on delay time | t _{on} | I _D =2.8A, V _{GS(on)} =10V, R _G =10Ω, V _{DD} =150V | | 12 | | ns | |
| Rise time | t _r | | | 10 | | ns | |
| Turn-off delay time | t _{off} | | | | 35 | | ns |
| Fall time | t _f | | | | 12 | | ns |