

2SK2573 (Tentative)

电话"2942573"供应商

Silicon N-Channel Power F-MOS FET

■ Features

- Avalanche energy capacity guaranteed
- High-speed switching
- Low ON-resistance
- No secondary breakdown

■ Applications

- Contactless relay
- Diving circuit for a solenoid
- Driving circuit for a motor
- Control equipment
- Switching power supply

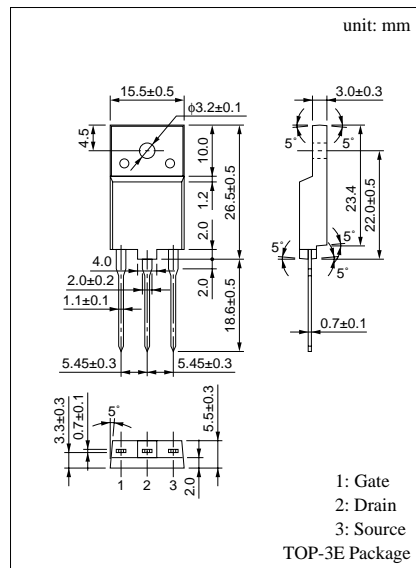
■ Absolute Maximum Ratings ($T_C = 25^\circ\text{C}$)

| Parameter | Symbol | Rated | Unit |
|-----------------------------------|--------------------------|-------------|------------------|
| Drain to Source breakdown voltage | V_{DSS} | 500 | V |
| Gate to Source voltage | V_{GSS} | ± 30 | V |
| Drain current | DC | I_D | ± 20 A |
| | Pulse | I_{DP} | ± 40 A |
| Avalanche energy capacity | EAS* | 20 | mJ |
| Allowable power dissipation | $T_C = 25^\circ\text{C}$ | P_D | 100 W |
| | $T_a = 25^\circ\text{C}$ | | 3 W |
| Channel temperature | T_{ch} | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

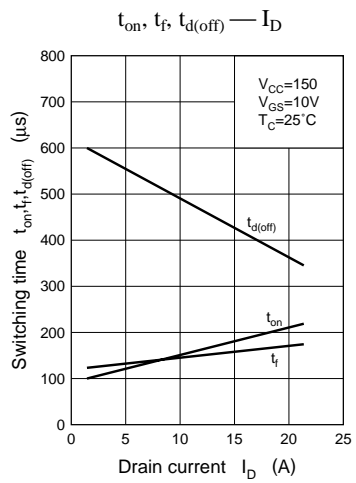
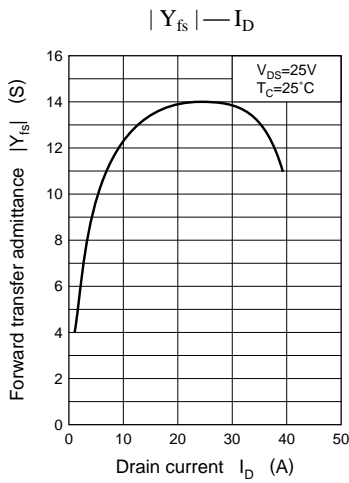
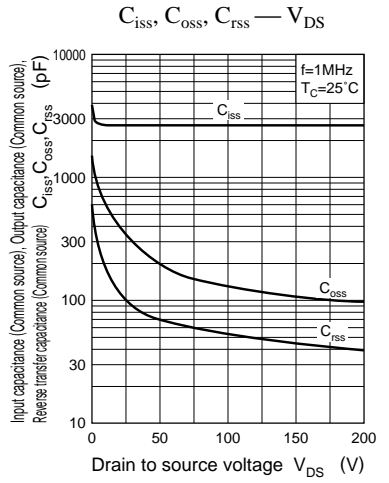
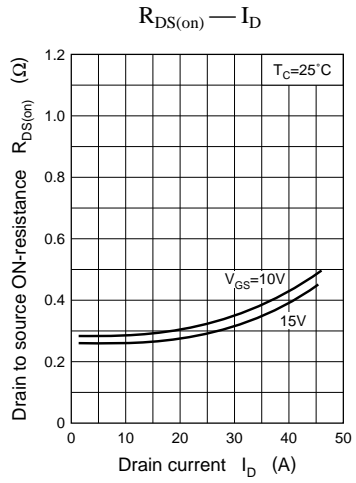
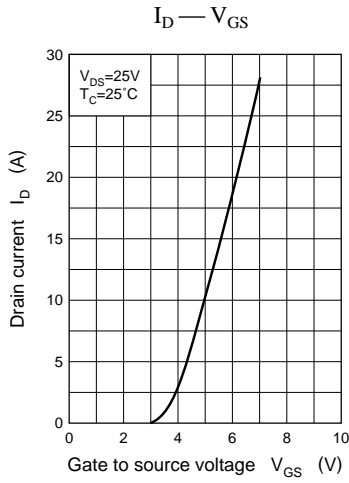
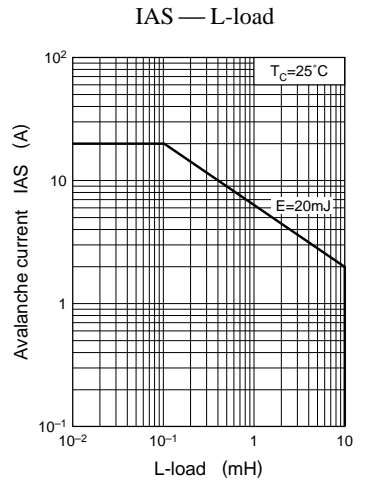
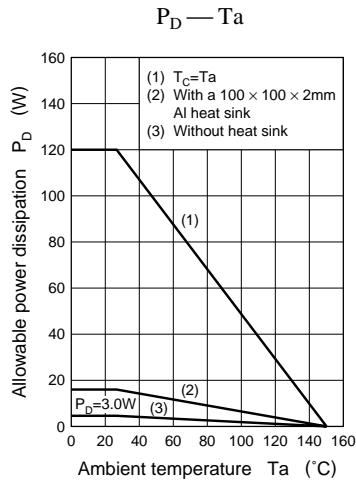
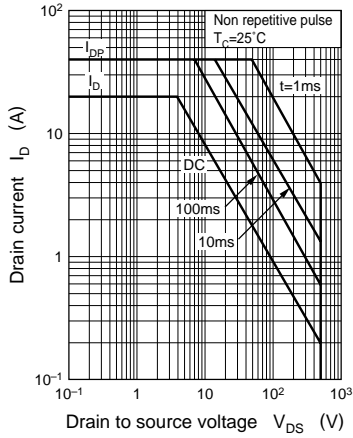
* $L = 0.1\text{mH}$, $I_L = 20\text{A}$, 1 pulse

■ Electrical Characteristics ($T_C = 25^\circ\text{C}$)

| Parameter | Symbol | Conditions | min | typ | max | Unit |
|---------------------------------------------------|----------------|-----------------------------------------------------------------------------------------|-----|------|---------|--------------------|
| Drain to Source cut-off current | I_{DSS} | $V_{DS} = 400\text{V}$, $V_{GS} = 0$ | | | 100 | μA |
| Gate to Source leakage current | I_{GSS} | $V_{GS} = \pm 20\text{V}$, $V_{DS} = 0$ | | | ± 1 | μA |
| Drain to Source breakdown voltage | V_{DSS} | $I_D = 1\text{mA}$, $V_{GS} = 0$ | 500 | | | V |
| Gate threshold voltage | V_{th} | $V_{DS} = 25\text{V}$, $I_D = 1\text{mA}$ | 1 | | 5 | V |
| Drain to Source ON-resistance | $R_{DS(on)}$ | $V_{GS} = 10\text{V}$, $I_D = 10\text{A}$ | | 0.32 | 0.4 | Ω |
| Forward transfer admittance | $ Y_{fs} $ | $V_{DS} = 25\text{V}$, $I_D = 10\text{A}$ | 7.2 | 12 | | S |
| Diode forward voltage | V_{DSF} | $I_{DR} = 20\text{A}$, $V_{GS} = 0$ | | | -2.8 | V |
| Input capacitance (Common Source) | C_{iss} | $V_{DS} = 20\text{V}$, $V_{GS} = 0$, $f = 1\text{MHz}$ | | 3000 | | pF |
| Output capacitance (Common Source) | C_{oss} | | 430 | | pF | |
| Reverse transfer capacitance (Common Source) | C_{rss} | | 175 | | pF | |
| Turn-on time | t_{on} | $V_{DD} = 150\text{V}$, $I_D = 10\text{A}$ $V_{GS} = 10\text{V}$, $R_L = 15\Omega$ | | 150 | | ns |
| Fall time | t_f | | 140 | | ns | |
| Turn-off time (delay time) | $t_{d(off)}$ | | 480 | | ns | |
| Thermal resistance between channel and case | $R_{th(ch-c)}$ | | | | 1.25 | $^\circ\text{C/W}$ |
| Thermal resistance between channel and atmosphere | $R_{th(ch-a)}$ | | | | 41.67 | $^\circ\text{C/W}$ |



查询"2SK2573"供应商



[查询"2SK2573"供应商](#) $R_{th(t)} - t$

