



No.4748

2SJ273

P-Channel MOS Silicon FET

Very High-Speed Switching Applications

Features

- Low ON resistance.
 - Very high-speed switching.
 - Low-voltage drive.
 - Micaless package facilitating easy mounting.

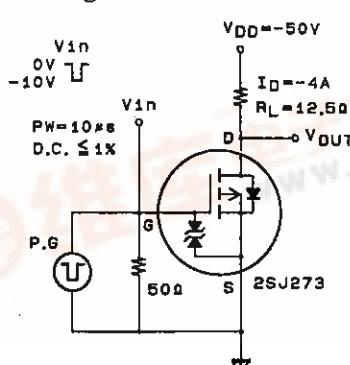
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

| Absolute Maximum Ratings at $T_A = 25^\circ\text{C}$ | | unit |
|--|-----------|---|
| Drain-to-Source Voltage | V_{DSS} | -100 V |
| Gate-to-Source Voltage | V_{GSS} | ± 20 V |
| Drain Current(DC) | I_D | -6 A |
| Drain Current(Pulse) | I_{DP} | PW $\leq 10\mu\text{s}$, duty cycle $\leq 1\%$ -24 A |
| Allowable Power Dissipation | P_D | 2.0 W |
| | | 25 W |
| Channel Temperature | T_{ch} | 150 $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 to +150 $^\circ\text{C}$ |

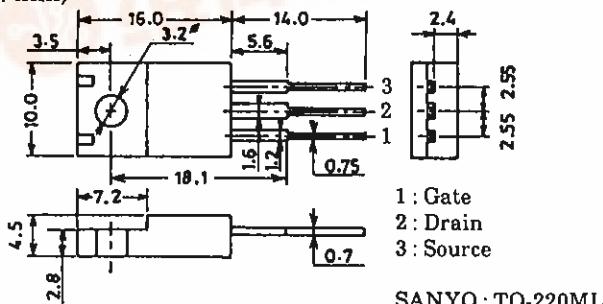
Electrical Characteristics at Ta = 25°C

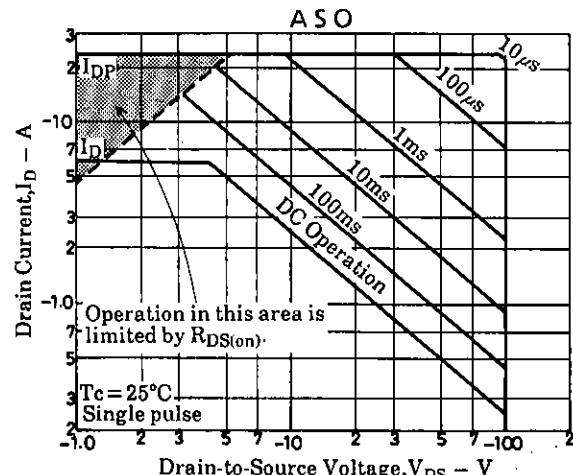
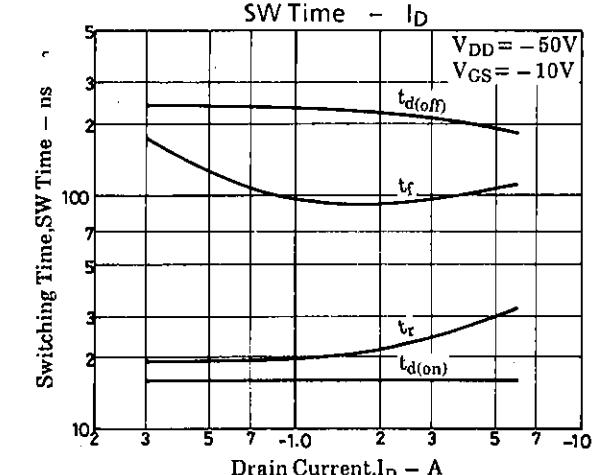
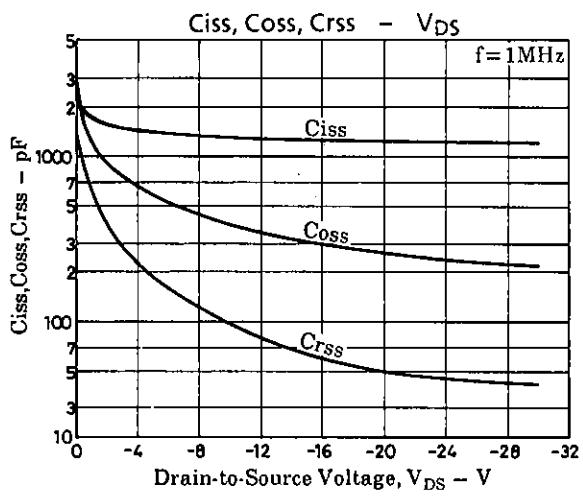
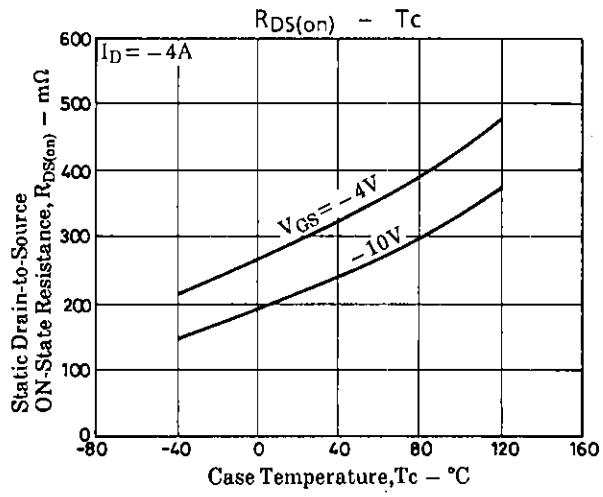
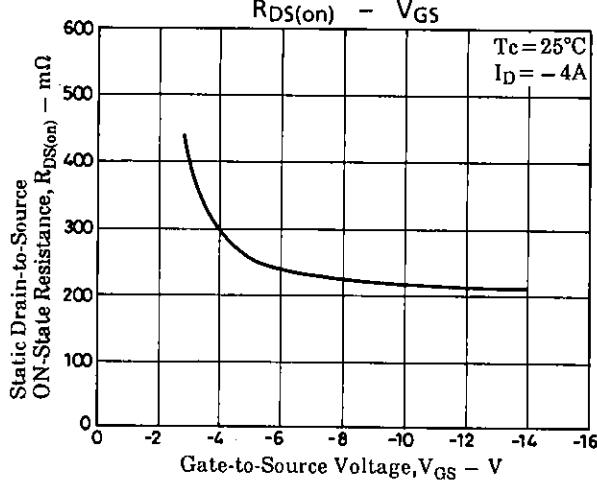
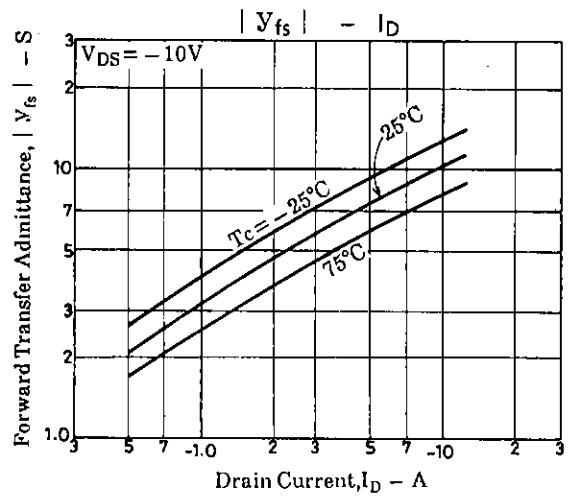
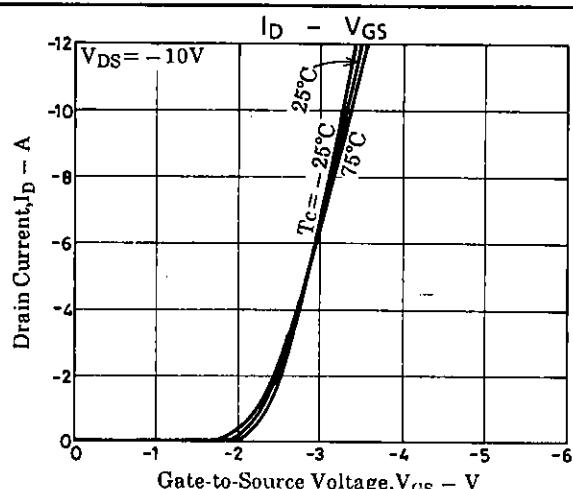
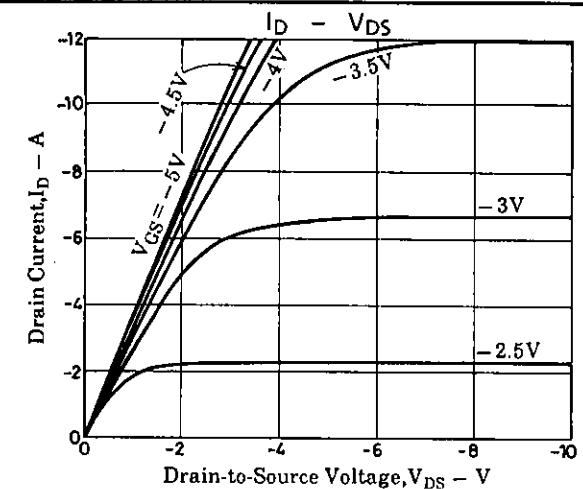
| Electrical Characteristics at $T_A = 25^\circ C$ | | $V_{GS} = 0$ | $I_D = -1\text{mA}$ | $V_{DS} = -100\text{V}$ | $V_{GS} = 0$ | $I_D = -100\text{mA}$ | $V_{DS} = -100\text{V}$ | $V_{GS} = 0$ | $I_D = -100\mu\text{A}$ |
|--|------------------------|--------------|--------------------------------|-------------------------|-----------------------------|-----------------------|-------------------------|--------------|-------------------------|
| D-S Breakdown Voltage | $V_{(BR)DSS}$ | | | | | -100 | | | V |
| G-S Breakdown Voltage | $V_{(BR)GSS}$ | | | | | ± 20 | | | V |
| Zero-Gate Voltage | $ V_{GS} $ | | | | | | | -100 | μA |
| Drain Current | $ I_{DS} $ | | | | | | | | |
| Gate-to-Source Leakage Current | $ I_{GS} $ | | | | | | | ± 10 | μA |
| Cutoff Voltage | $ V_{GS(\text{off})} $ | | | | | -1.0 | | -2.0 | V |
| Forward Transfer Admittance | $ Y_{fs} $ | | | | | 3.5 | 6.5 | | S |
| Static Drain-to-Source | $R_{DS(\text{on})}$ | | | | | | 0.22 | 0.3 | Ω |
| ON-State Resistance | $R_{DS(\text{on})}$ | | | | | | 0.3 | 0.4 | Ω |
| Input Capacitance | C_{iss} | | | | | | 1230 | | pF |
| Output Capacitance | C_{oss} | | | | | | 260 | | pF |
| Reverse Transfer Capacitance | C_{rss} | | | | | | 50 | | pF |
| Turn-ON Delay Time | $t_{d(on)}$ | | | | See specified Test Circuit. | | 16 | | ns |
| Rise Time | t_r | | " | | | | 27 | | ns |
| Turn-OFF Delay Time | $t_{d(off)}$ | | " | | | | 200 | | ns |
| Fall Time | t_f | | " | | | | 100 | | ns |
| Diode Forward Voltage | V_{SD} | | $I_S = -6\text{A}, V_{GS} = 0$ | | | -1.0 | -1.5 | | V |

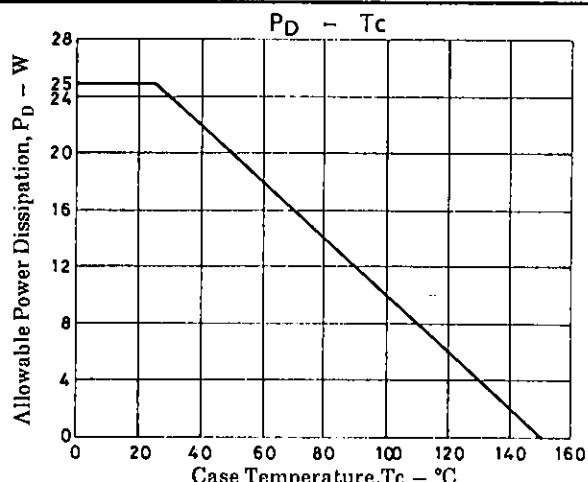
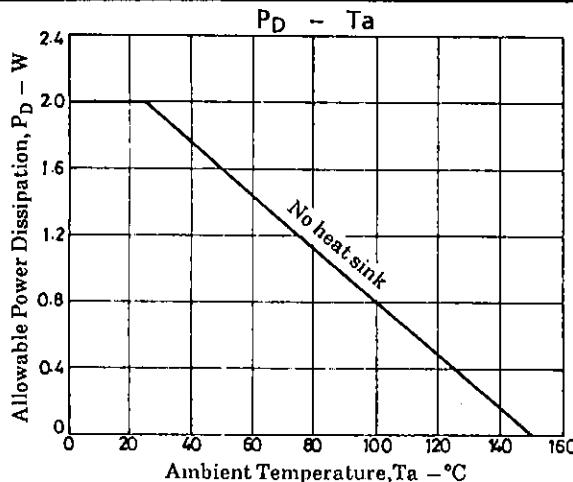
Switching Time Test Circuit



Package Dimensions 2063A
(unit : mm)







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