

**SANYO**

No.5267

**2SJ417**

P-Channel Silicon MOSFET

**Ultrahigh-Speed Switching Applications**

**Features**

- Low ON-resistance.
- Ultrahigh-speed switching.
- 4V drive.

**Absolute Maximum Ratings at Ta = 25°C**

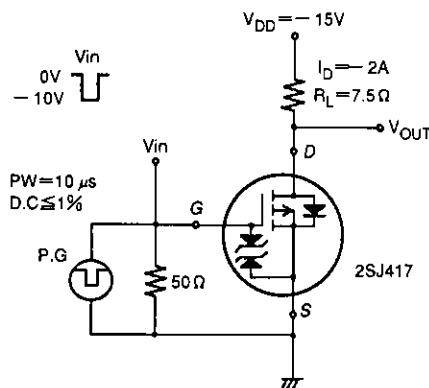
|                             |           |   | unit       |
|-----------------------------|-----------|---|------------|
| Drain-to-Source Voltage     | $V_{DS}$  | -30   | V          |
| Gate-to-Source Voltage      | $V_{GS}$  | $\pm 20$                                      | V          |
| Drain Current(DC)           | $I_D$     | -4  | A          |
| Drain Current(Pulse)        | $I_{DP}$  | $PW \leq 10\mu s, \text{duty cycle} \leq 1\%$ | -16 A      |
| Allowable Power Dissipation | $P_D$     | 1   | W          |
|                             |           | $T_c = 25^\circ C$                            | 20 W       |
| Channel Temperature         | $T_{ch}$  | 150   | $^\circ C$ |
| Storage Temperature         | $T_{stg}$ | -55 to +150                                   | $^\circ C$ |

**Electrical Characteristics at Ta = 25°C**

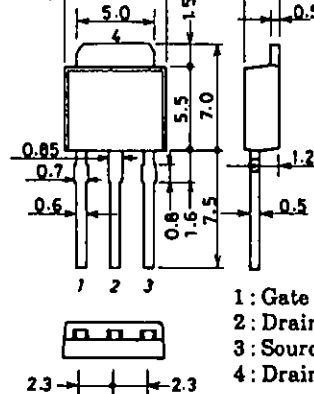
|                                |               |                                | min  | typ  | max      | unit       |
|--------------------------------|---------------|--------------------------------|------|------|----------|------------|
| D-S Breakdown Voltage          | $V_{(BR)DSS}$ | $I_D = -1mA, V_{GS} = 0$       | -30  |      |          | V          |
| Zero-Gate Voltage              | $I_{DSS}$     | $V_{DS} = -30V, V_{GS} = 0$    |      |      | -100     | $\mu A$    |
| Drain Current                  |               |                                |      |      |          |            |
| Gate-to-Source Leakage Current | $I_{GSS}$     | $V_{GS} = \pm 16V, V_{DS} = 0$ |      |      | $\pm 10$ | $\mu A$    |
| Cutoff Voltage                 | $V_{GS(off)}$ | $V_{DS} = -10V, I_D = -1mA$    | -1.0 |      | -2.5     | V          |
| Forward Transfer Admittance    | $ Y_{fs} $    | $V_{DS} = -10V, I_D = -2A$     | 2    | 4    |          | S          |
| Static Drain-to-Source         | $R_{DS(on)}$  | $I_D = -2A, V_{GS} = -10V$     |      | 120  | 160      | m $\Omega$ |
| ON-State Resistance            | $R_{DS(on)}$  | $I_D = -2A, V_{GS} = -4V$      |      | 210  | 290      | m $\Omega$ |
| Input Capacitance              | $C_{iss}$     | $V_{DS} = -10V, f = 1MHz$      |      | 370  |          | pF         |
| Output Capacitance             | $C_{oss}$     | $V_{DS} = -10V, f = 1MHz$      |      | 230  |          | pF         |
| Reverse Transfer Capacitance   | $C_{rss}$     | $V_{DS} = -10V, f = 1MHz$      |      | 70   |          | pF         |
| Turn-ON Delay Time             | $t_{d(on)}$   | See specified Test Circuit.    |      | 10   |          | ns         |
| Rise Time                      | $t_r$         | "                              |      | 50   |          | ns         |
| Turn-OFF Delay Time            | $t_{d(off)}$  | "                              |      | 135  |          | ns         |
| Fall Time                      | $t_f$         | "                              |      | 125  |          | ns         |
| Diode Forward Voltage          | $V_{SD}$      | $I_S = -4A, V_{GS} = 0$        | -1.0 | -1.2 |          | V          |

Marking : JJ

**Switching Time Test Circuit**

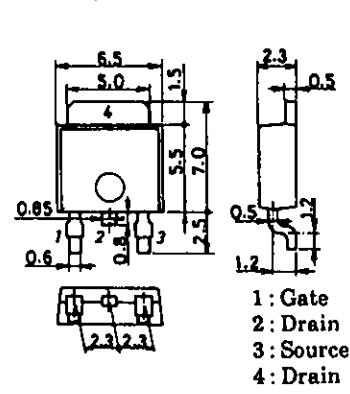


**Package Dimensions 2083B (unit : mm)**



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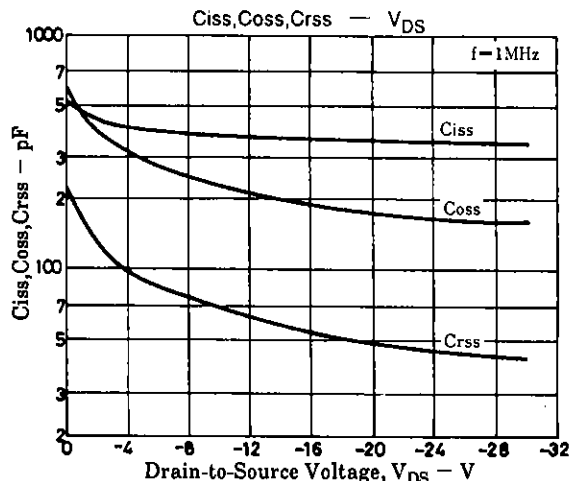
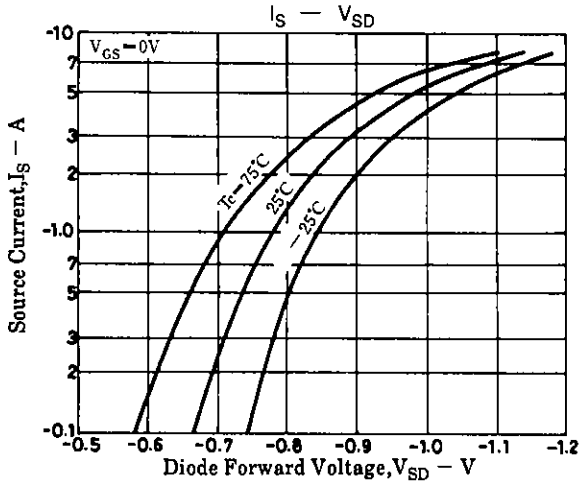
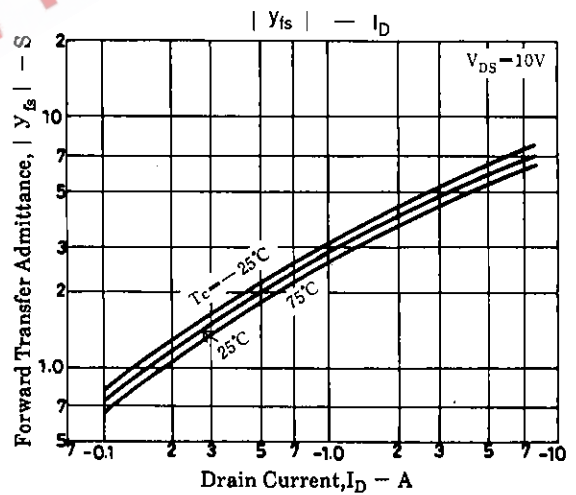
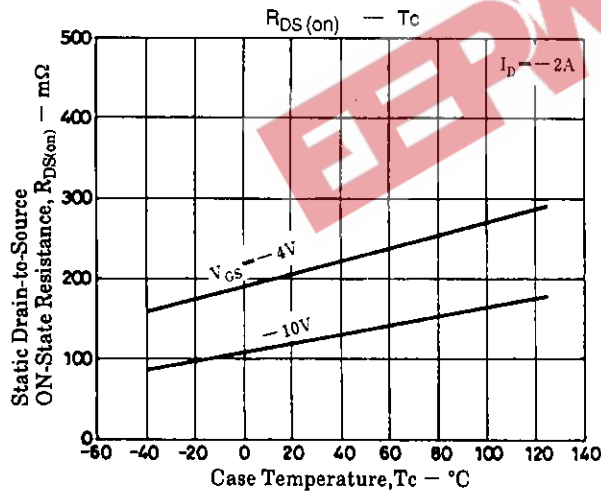
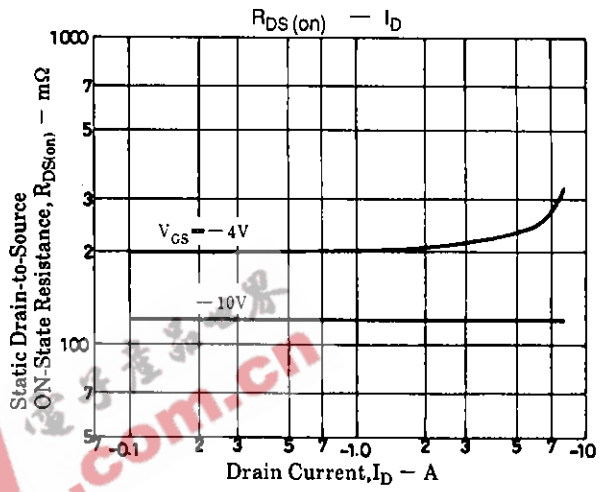
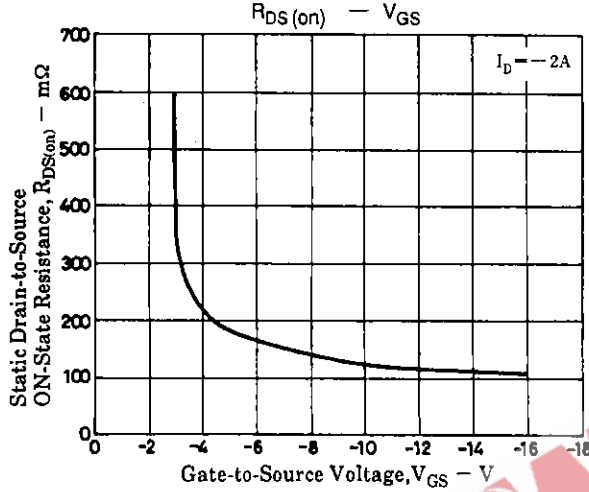
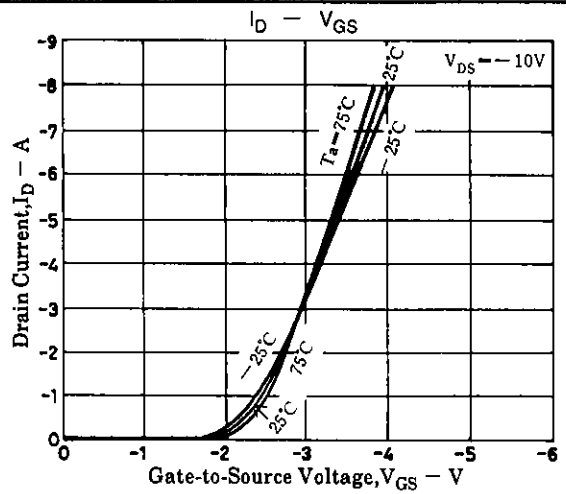
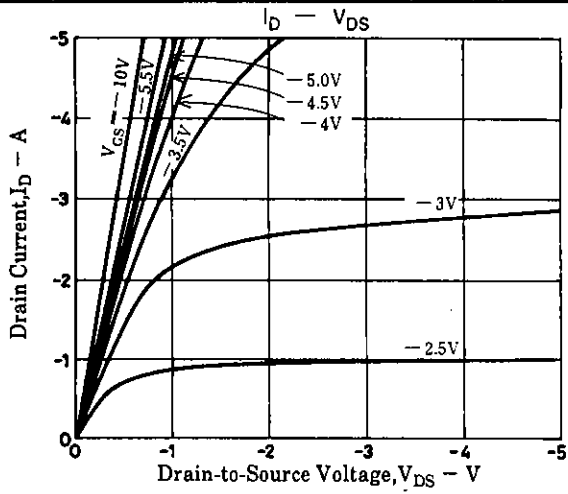
**Package Dimensions 2092B (unit : mm)**

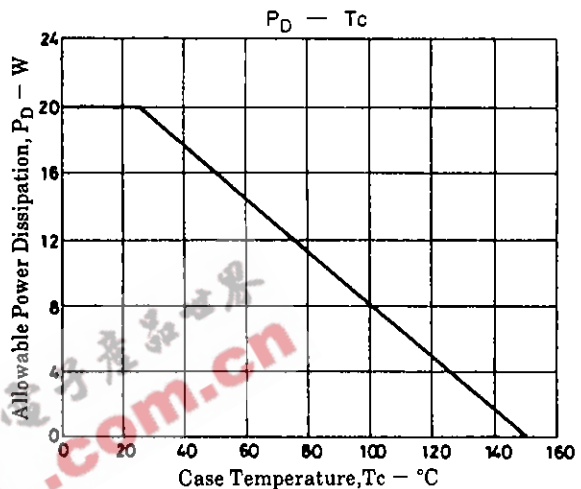
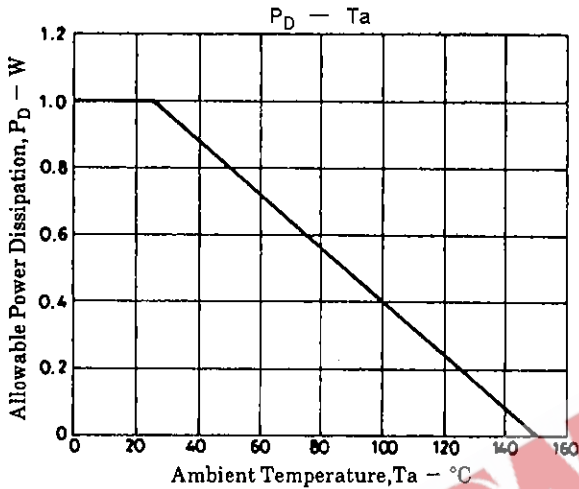
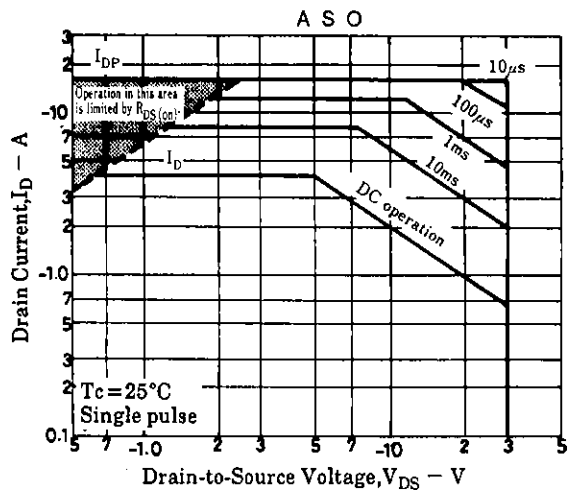
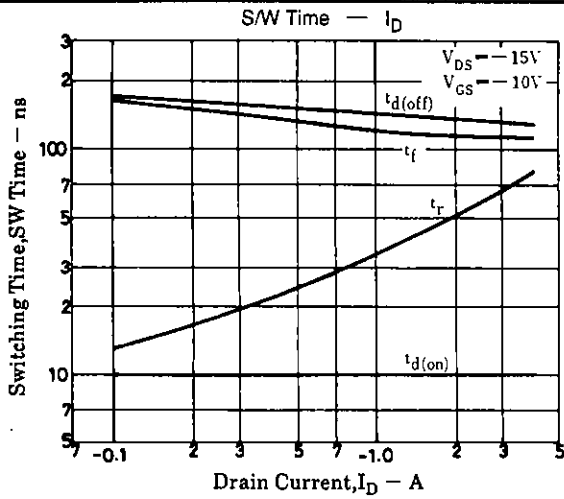


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