

## 2SJ200

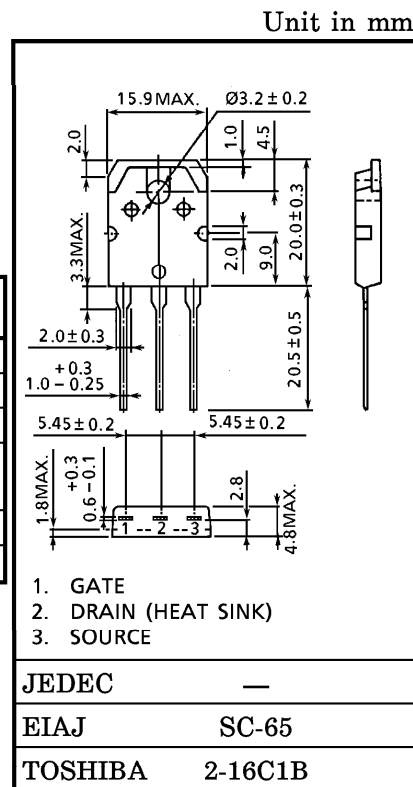
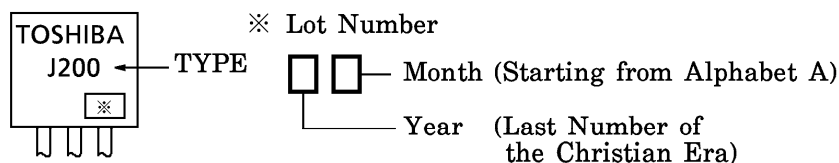
## HIGH POWER AMPLIFIER APPLICATION

- High Breakdown Voltage :  $V_{DSS} = -180\text{ V}$
- High Forward Transfer Admittance :  $|Y_{fs}| = 4.0\text{ S (Typ.)}$
- Complementary to 2SK1529

MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )

| CHARACTERISTIC  | SYMBOL    | RATING   | UNIT             |
|---|-----------|----------|------------------|
| Drain-Source Voltage                                    | $V_{DSS}$ | -180     | V                |
| Gate-Source Voltage                                     | $V_{GSS}$ | $\pm 20$ | V                |
| Drain Current   | $I_D$     | -10      | A                |
| Drain Power Dissipation<br>( $T_c = 25^\circ\text{C}$ ) | $P_D$     | 120      | W                |
| Channel Temperature                                     | $T_{ch}$  | 150      | $^\circ\text{C}$ |
| Storage Temperature Range                               | $T_{stg}$ | -55~150  | $^\circ\text{C}$ |

## MARKING



Weight : 4.7 g

ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

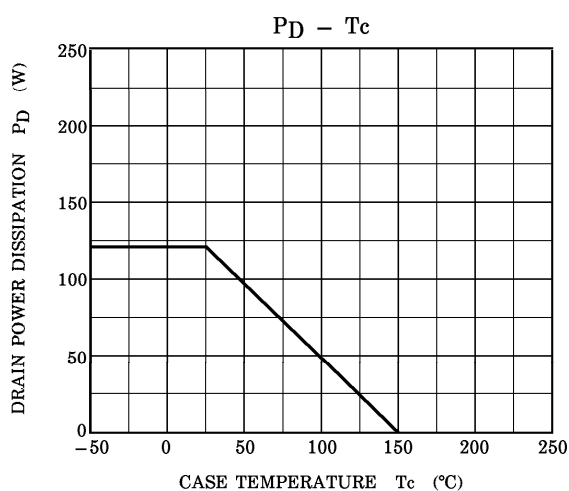
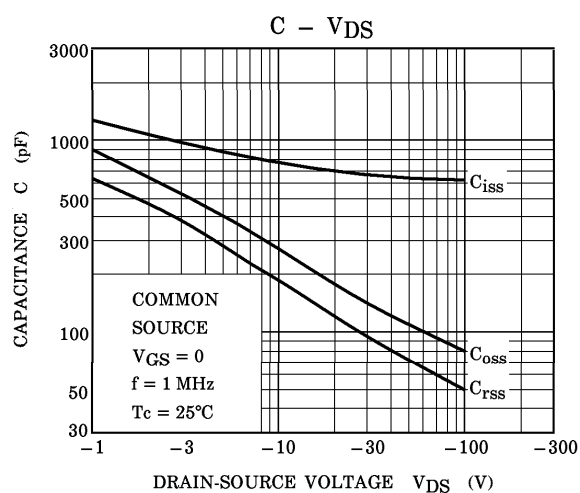
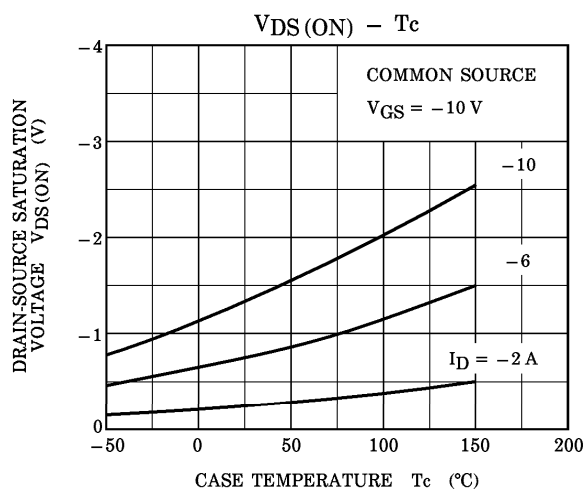
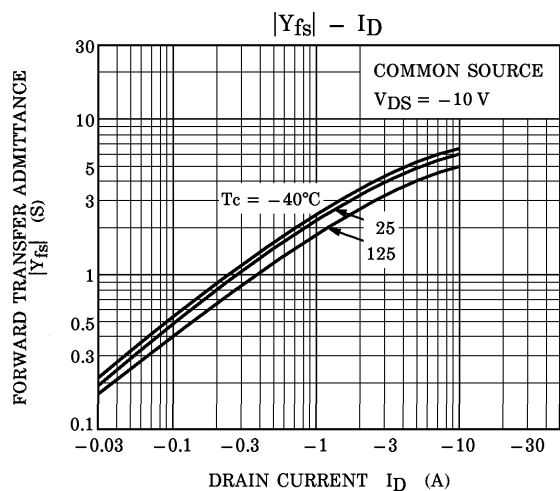
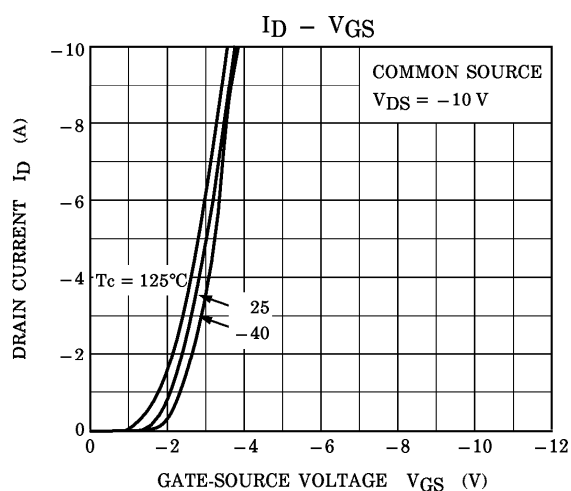
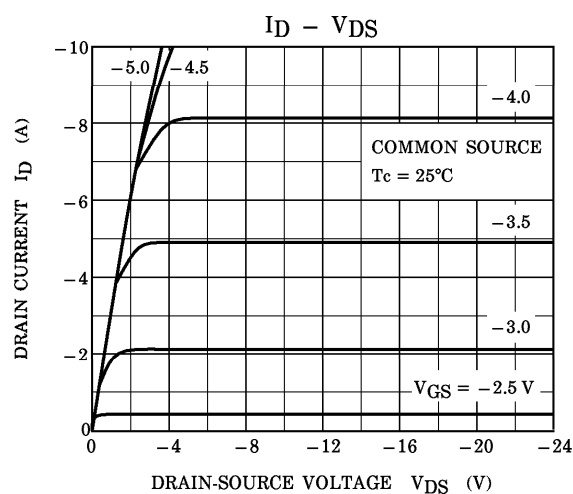
| CHARACTERISTIC                  | SYMBOL                  | TEST CONDITION   | MIN. | TYP. | MAX.      | UNIT          |
|---------------------------------|-------------------------|--|------|------|-----------|---------------|
| Drain Cut-Off Current           | $I_{DSS}$               | $V_{DS} = -180\text{ V}, V_{GS} = 0$                       | —    | —    | -1.0      | mA            |
| Gate Leakage Current            | $I_{GSS}$               | $V_{DS} = 0, V_{GS} = \pm 20\text{ V}$                     | —    | —    | $\pm 0.5$ | $\mu\text{A}$ |
| Drain-Source Breakdown Voltage  | $V_{(BR)DSS}$           | $I_D = -10\text{ mA}, V_{GS} = 0$                          | -180 | —    | —         | V             |
| Gate-Source Cut-Off Voltage     | $V_{GS(OFF)}$<br>(Note) | $V_{DS} = -10\text{ V}, I_D = -0.1\text{ A}$               | -0.8 | —    | -2.8      | V             |
| Drain-Source Saturation Voltage | $V_{DS(ON)}$            | $I_D = -6\text{ A}, V_{GS} = -10\text{ V}$                 | —    | -1.5 | -5.0      | V             |
| Forward Transfer Admittance     | $ Y_{fs} $              | $V_{DS} = -10\text{ V}, I_D = -3\text{ A}$                 | —    | 4.0  | —         | S             |
| Input Capacitance               | $C_{iss}$               | $V_{DS} = -30\text{ V}, V_{GS} = 0,$<br>$f = 1\text{ MHz}$ | —    | 1300 | —         | pF            |
| Output Capacitance              | $C_{oss}$               | $V_{DS} = -30\text{ V}, V_{GS} = 0,$<br>$f = 1\text{ MHz}$ | —    | 350  | —         | pF            |
| Reverse Transfer Capacitance    | $C_{rss}$               | $V_{DS} = -30\text{ V}, V_{GS} = 0,$<br>$f = 1\text{ MHz}$ | —    | 200  | —         | pF            |

(Note) :  $V_{GS(OFF)}$  Classification O : -0.8~-1.6, Y : -1.4~-2.8

This transistor is an electrostatic sensitive device. Please handle with caution.

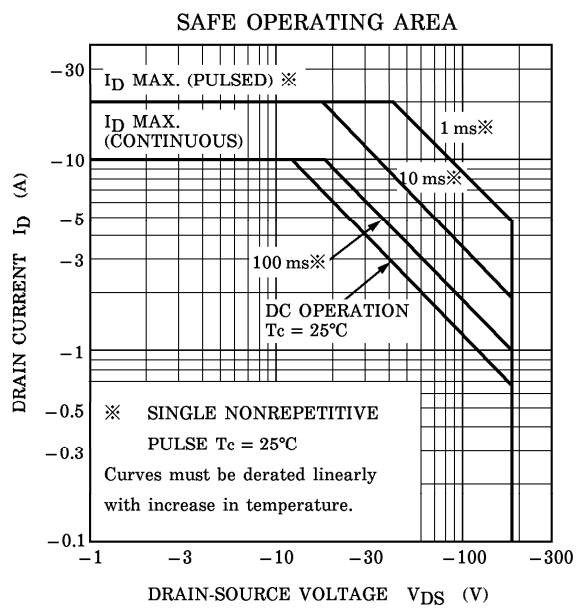
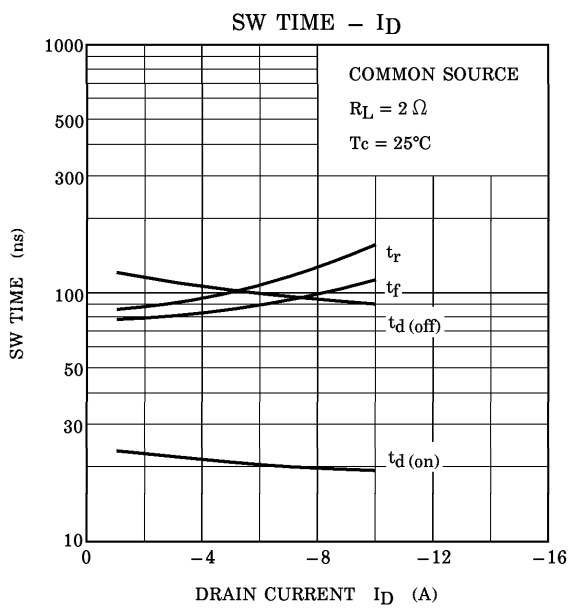
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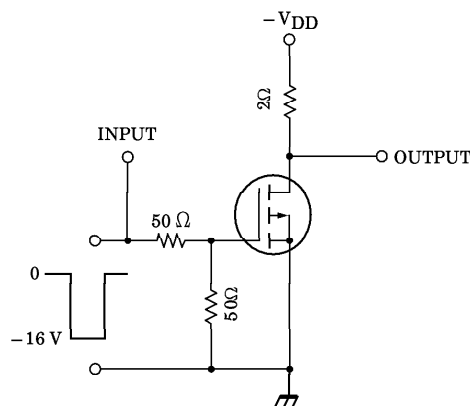


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SWITCHING TIME TEST CIRCUIT



WAVEFORMS

