

2SK1530

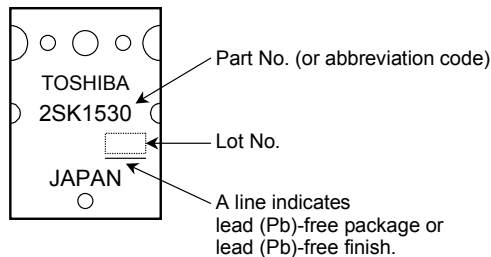
High-Power Amplifier Application

- High breakdown voltage : $V_{DSS} = 200V$
- High forward transfer admittance : $|Y_{fs}| = 5.0 S$ (typ.)
- Complementary to 2SJ201

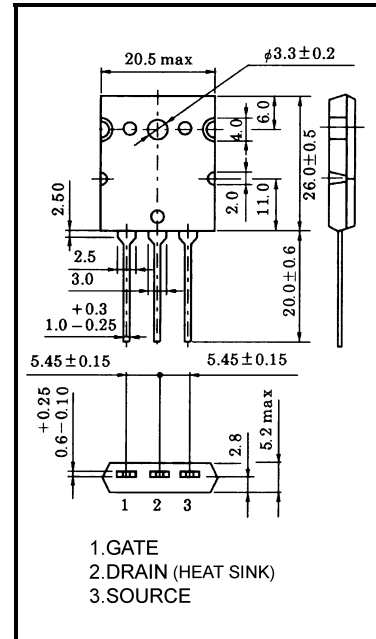
Maximum Ratings ($T_a = 25^\circ C$)

| Characteristics | Symbol | Rating | Unit |
|--|-----------|----------|------------|
| Drain-source voltage | V_{DSS} | 200 | V |
| Gate-source voltage | V_{GSS} | ± 20 | V |
| Drain current (Note 1) | I_D | 12 | A |
| Drain power dissipation ($T_c = 25^\circ C$) | P_D | 150 | W |
| Channel temperature | T_c | 150 | $^\circ C$ |
| Storage temperature range | T_{stg} | -55~150 | $^\circ C$ |

Marking



Unit: mm



| | |
|---------|---------|
| JEDEC | — |
| JEITA | — |
| TOSHIBA | 2-21F1B |

Weight: 9.75 g (typ.)

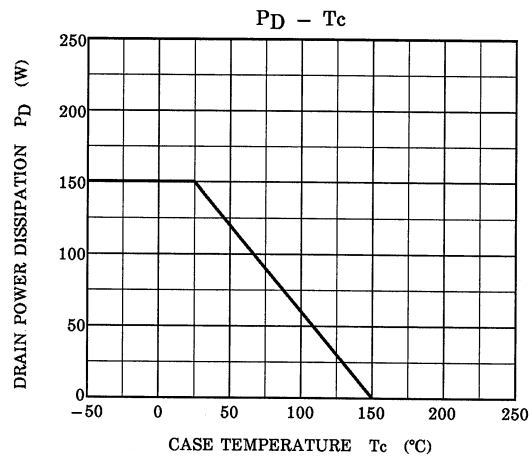
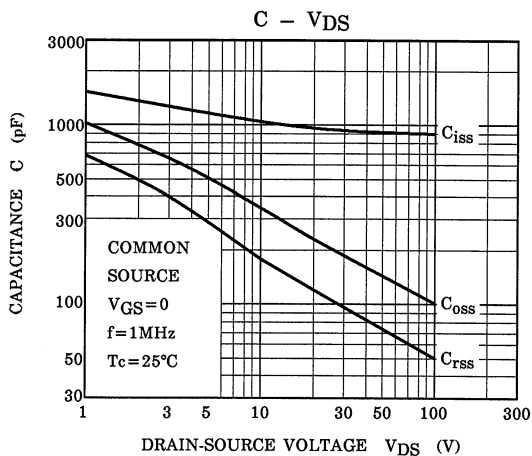
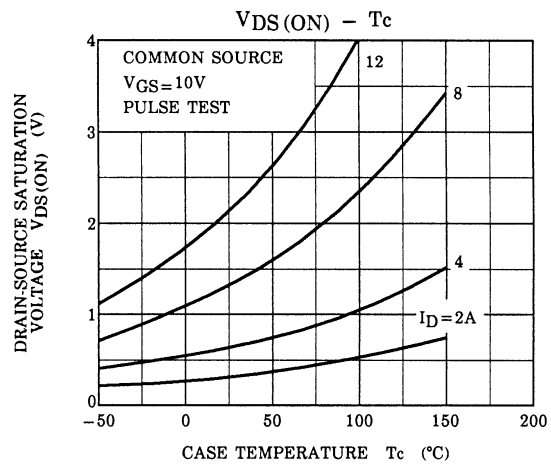
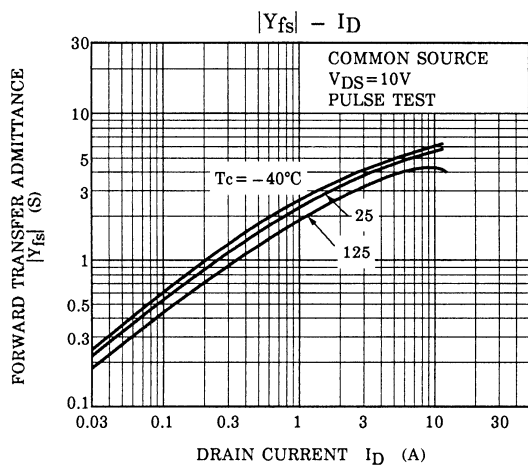
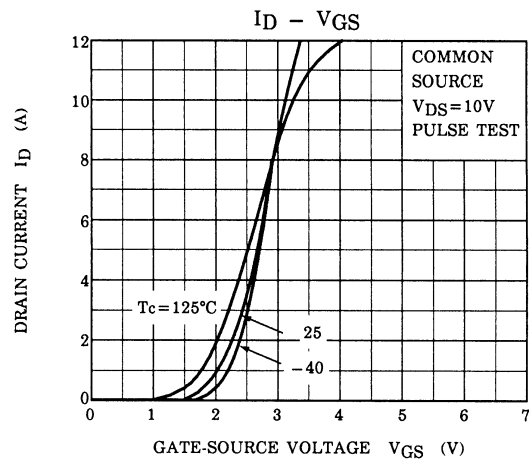
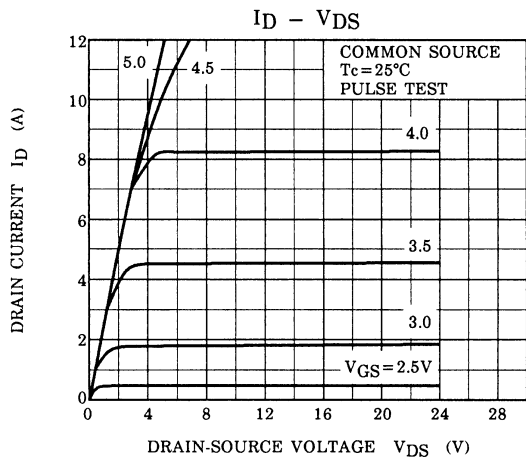
Electrical Characteristics ($T_a = 25^\circ C$)

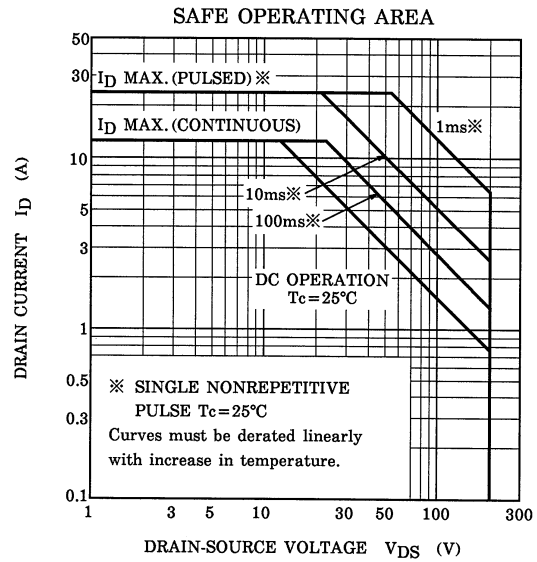
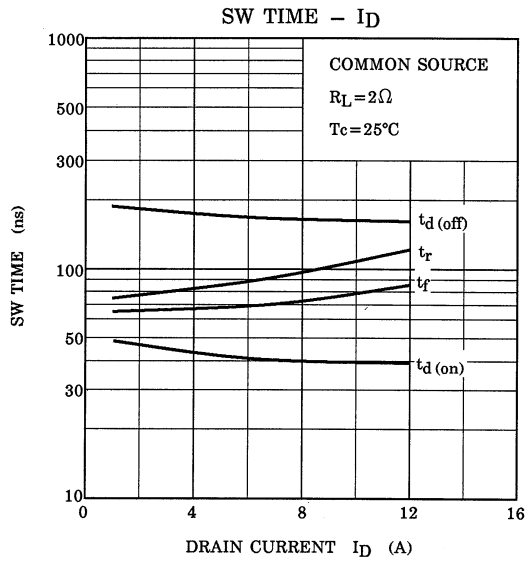
| Characteristics | Symbol | Test Condition | Min | Typ. | Max | Unit |
|--------------------------------------|---------------|--|-----|------|-----------|---------|
| Drain cut-off current | I_{DSS} | $V_{DS} = 200 V, V_{GS} = 0$ | — | — | 1.0 | mA |
| Gate leakage current | I_{GSS} | $V_{DS} = 0V, V_{GS} = \pm 20 V$ | — | — | ± 0.5 | μA |
| Drain-source breakdown voltage | $V_{(BR)DSS}$ | $I_D = 10 mA, V_{GS} = 0$ | 200 | — | — | V |
| Drain-source saturation voltage | $V_{DS(ON)}$ | $I_D = 8 A, V_{GS} = 10 V$ | — | 2.5 | 5.0 | V |
| Gate-source cut-off voltage (Note 2) | $V_{GS(OFF)}$ | $V_{DS} = 10 V, I_D = 0.1 A$ | 0.8 | — | 2.8 | V |
| Forward transfer admittance | $ Y_{fs} $ | $V_{DS} = 10 V, I_D = 5 A$ | — | 5.0 | — | S |
| Input capacitance | C_{iss} | $V_{DS} = 30 V, V_{GS} = 0, f = 1 MHz$ | — | 900 | — | pF |
| Output capacitance | C_{oss} | $V_{DS} = 30 V, V_{GS} = 0, f = 1 MHz$ | — | 180 | — | |
| Reverse transfer capacitance | C_{rss} | $V_{DD} = 30 V, V_{GS} = 0, f = 1 MHz$ | — | 100 | — | |

Note 1: Ensure that the channel temperature does not exceed 150 $^\circ C$.

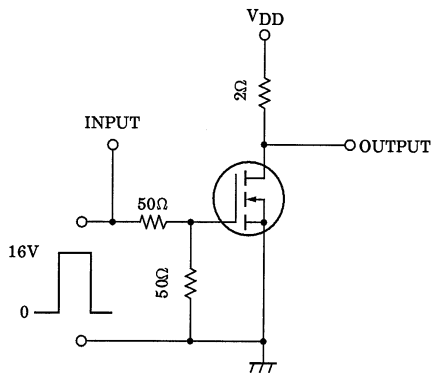
Note 2: $V_{GS(OFF)}$ Classification 0: 0.8~1.6 Y: 1.4~2.8

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

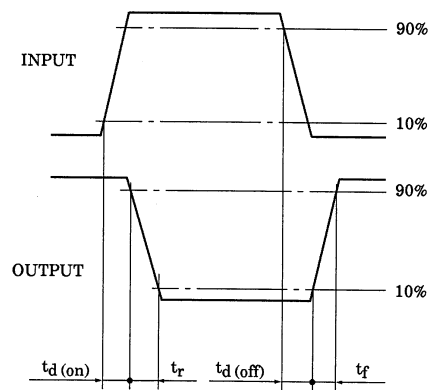




Switching Time Test Circuit



Waveforms



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