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| SANYO | No.3557A | 2SK1419 |
| | | N-Channel MOS Silicon FET Very High-Speed Switching Applications |

Features

- Low ON resistance.
- Very high-speed switching.
- Converters.
- Micaless package facilitating mounting.

Absolute Maximum Ratings at Ta = 25°C

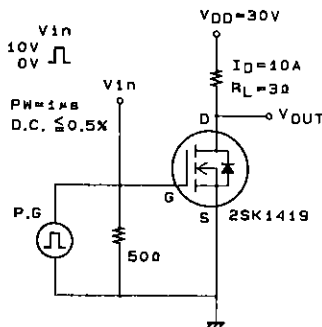
| | | | unit |
|-----------------------------|------------------|----------------------------|-------|
| Drain to Source Voltage | V _{DSS} | 60 | V |
| Gate to Source Voltage | V _{GSS} | ±20 | V |
| Drain Current(DC) | I _D | 15 | A |
| Drain Current(Pulse) | I _{DP} | PW ≤ 10μs, duty cycle ≤ 1% | 60 A |
| Allowable Power Dissipation | P _D | T _c = 25°C | 25 W |
| | | | 2.0 W |
| Channel Temperature | T _{ch} | 150 | °C |
| Storage Temperature | T _{stg} | -55 to +150 | °C |

Electrical Characteristics at Ta = 25°C

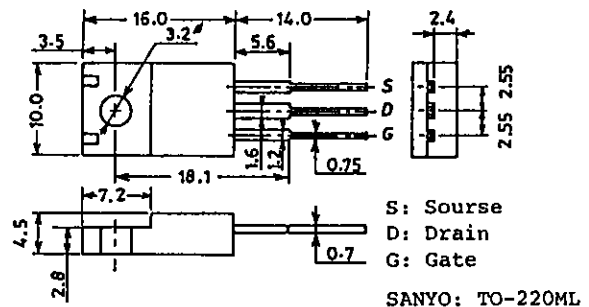
| | | | min | typ | max | unit |
|--|----------------------|---|-----|-----|------|------|
| D-S Breakdown Voltage | V _{(BR)DSS} | I _D = 1mA, V _{GS} = 0 | 60 | | | V |
| Zero Gate Voltage Drain Current | I _{DSS} | V _{DS} = 60V, V _{GS} = 0 | | | 100 | μA |
| Gate to Source Leakage Current | I _{GSS} | V _{GS} = ±20V, V _{DS} = 0 | | | ±100 | nA |
| Cutoff Voltage | V _{GS(off)} | V _{DS} = 10V, I _D = 1mA | 1.5 | | 2.5 | V |
| Forward Transfer Admittance | Y _{fs} | V _{DS} = 10V, I _D = 10A | 6.0 | 10 | | S |
| Static Drain to Source on State Resistance | R _{DS(on)} | I _D = 10A, V _{GS} = 10V | | 60 | 80 | mΩ |
| Input Capacitance | C _{iss} | V _{DS} = 20V, f = 1MHz | | 750 | | pF |
| Output Capacitance | C _{oss} | V _{DS} = 20V, f = 1MHz | | 350 | | pF |
| Reverse Transfer Capacitance | C _{rss} | V _{DS} = 20V, f = 1MHz | | 90 | | pF |
| Turn-ON Delay Time | t _{d(on)} | I _D = 10A, V _{GS} = 10V V _{DD} = 30V, R _{GS} = 50Ω | | 12 | | ns |
| Rise Time | t _r | | 43 | | ns | |
| Turn-OFF Delay Time | t _{d(off)} | | 90 | | ns | |
| Fall Time | t _f | | 60 | | ns | |
| Diode Forward Voltage | V _{SD} | I _S = 15A, V _{GS} = 0 | | | 1.8 | V |

(Note) Be careful in handling the 2SK1419 because it has no protection diode between gate and source.

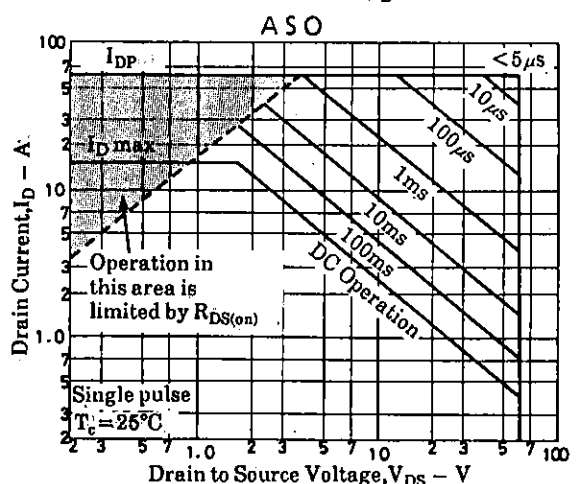
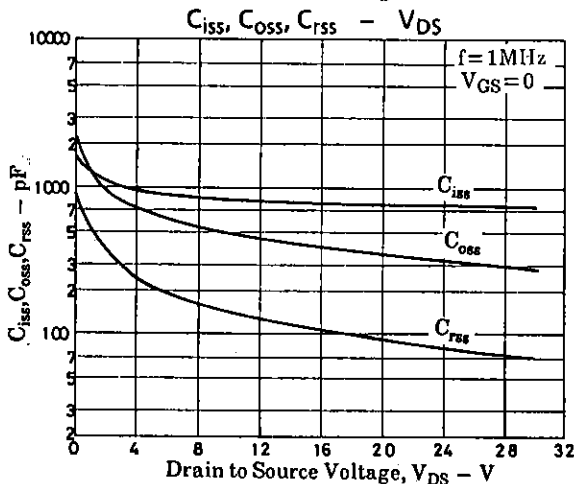
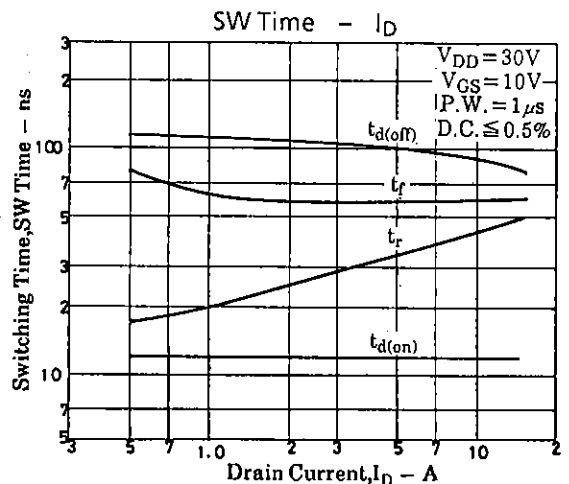
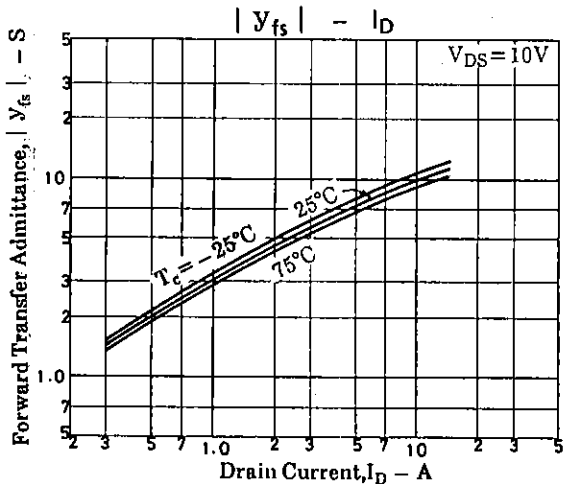
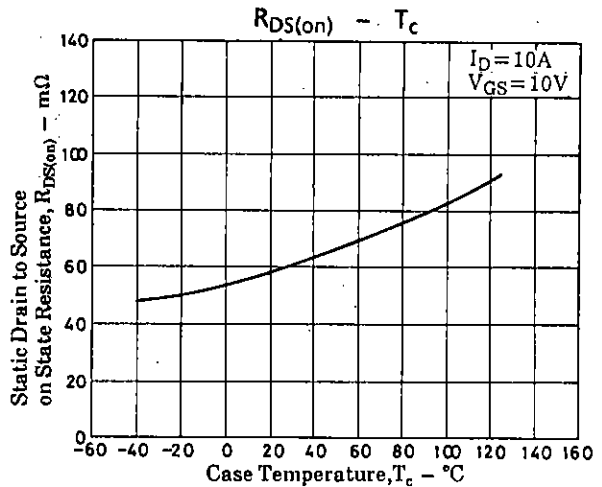
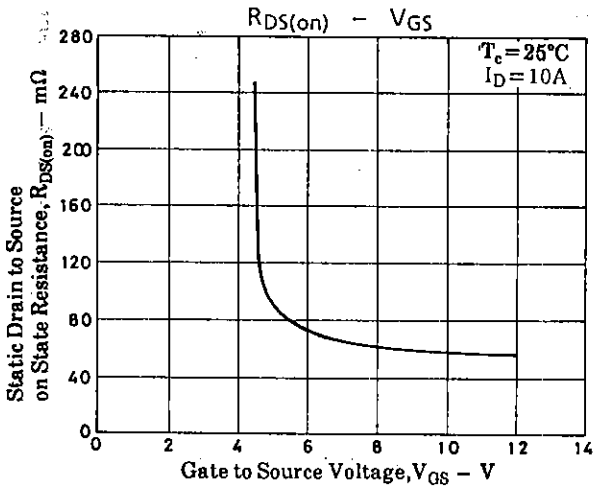
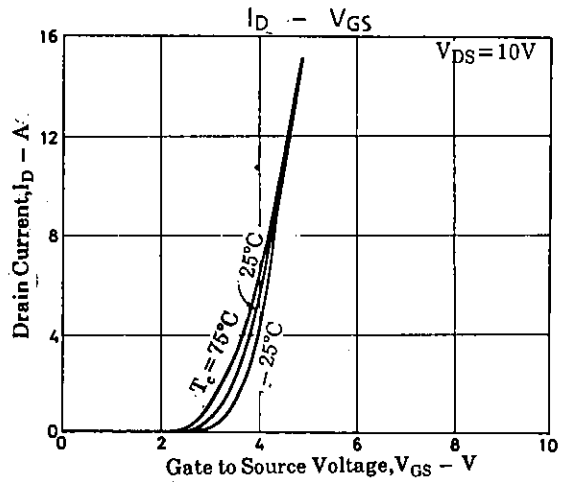
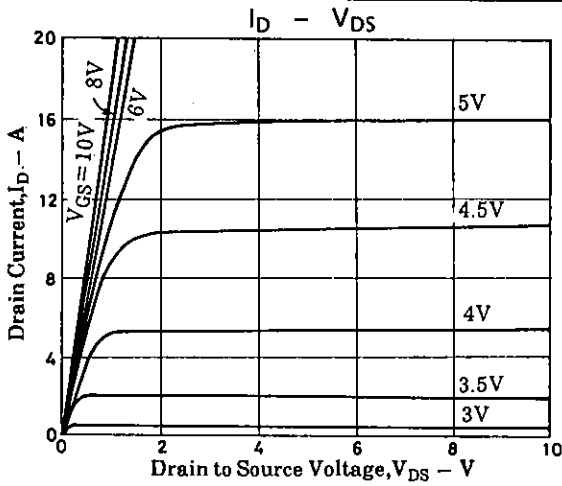
Switching Time Test Circuit

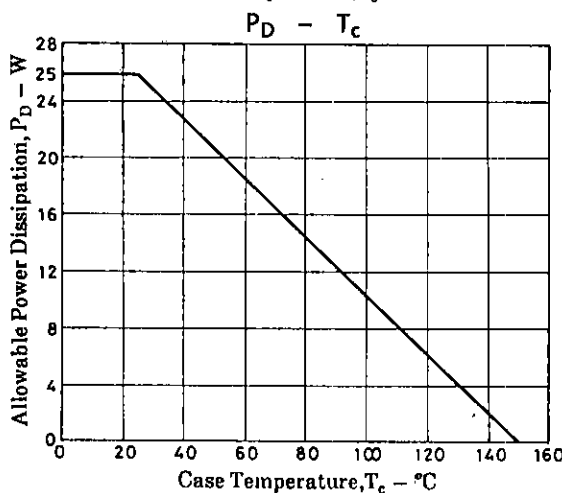
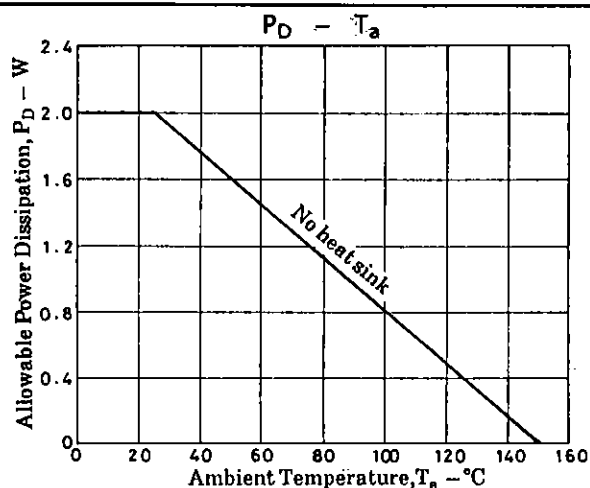
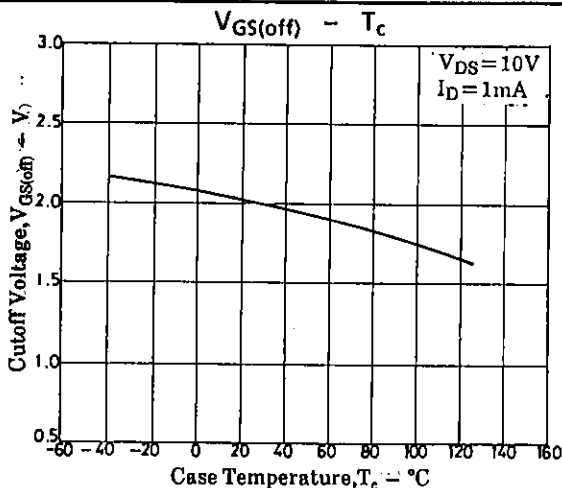


Package Dimensions 2063 (unit: mm)



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