

### Features

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

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

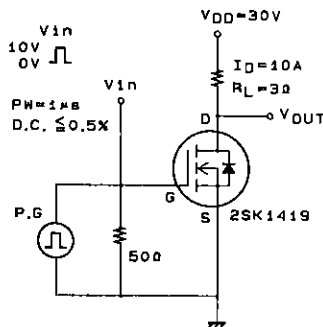
			unit
Drain to Source Voltage	$V_{DS}$	60	V
Gate to Source Voltage	$V_{GS}$	$\pm 20$	V
Drain Current(DC)	$I_D$	15	A
Drain Current(Pulse)	$I_{DP}$	$PW \leq 10\mu\text{s}, \text{duty cycle} \leq 1\%$	A
Allowable Power Dissipation	$P_D$	$T_c = 25^\circ\text{C}$	25 W
		2.0	W
Channel Temperature	$T_{ch}$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

### Electrical Characteristics at $T_a = 25^\circ\text{C}$

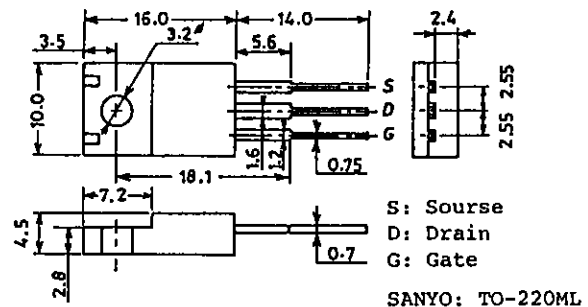
			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1\text{mA}, V_{GS} = 0$	60			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = 60\text{V}, V_{GS} = 0$			100	$\mu\text{A}$
Gate to Source Leakage Current	$I_{GSS}$	$V_{GS} = \pm 20\text{V}, V_{DS} = 0$			$\pm 100$	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10\text{V}, I_D = 1\text{mA}$	1.5		2.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 10\text{V}, I_D = 10\text{A}$	6.0	10		S
Static Drain to Source on State Resistance	$R_{DS(on)}$	$I_D = 10\text{A}, V_{GS} = 10\text{V}$		60	80	$\text{m}\Omega$
Input Capacitance	$C_{iss}$	$V_{DS} = 20\text{V}, f = 1\text{MHz}$		750		pF
Output Capacitance	$C_{oss}$	$V_{DS} = 20\text{V}, f = 1\text{MHz}$		350		pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS} = 20\text{V}, f = 1\text{MHz}$		90		pF
Turn-ON Delay Time	$t_{d(on)}$	$I_D = 10\text{A}, V_{GS} = 10\text{V}$ $V_{DD} = 30\text{V}, R_{GS} = 50\Omega$		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	$V_{SD}$	$I_S = 15\text{A}, V_{GS} = 0$			1.8	V

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

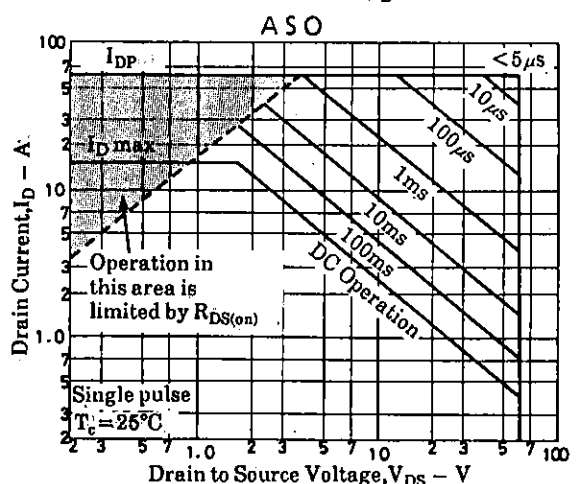
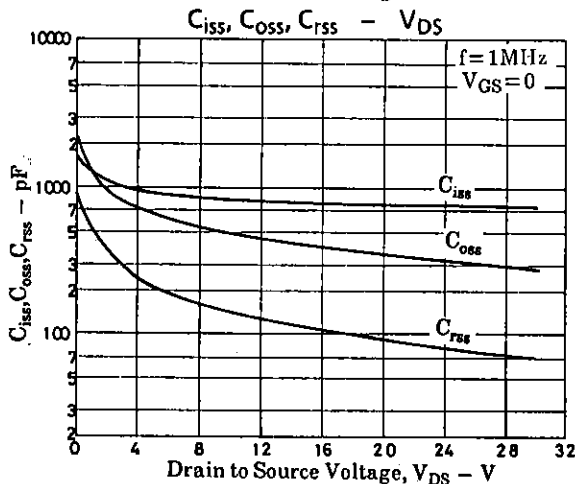
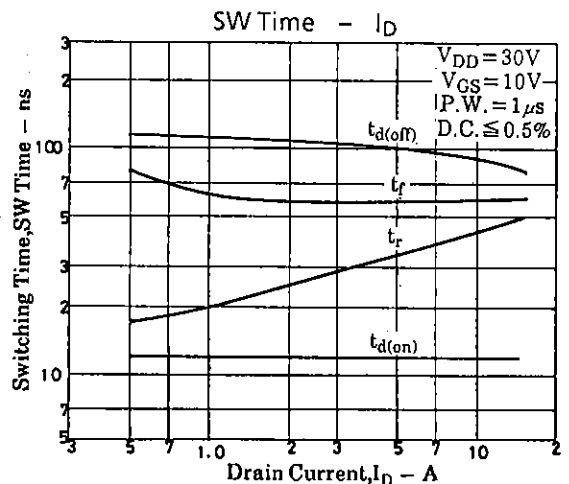
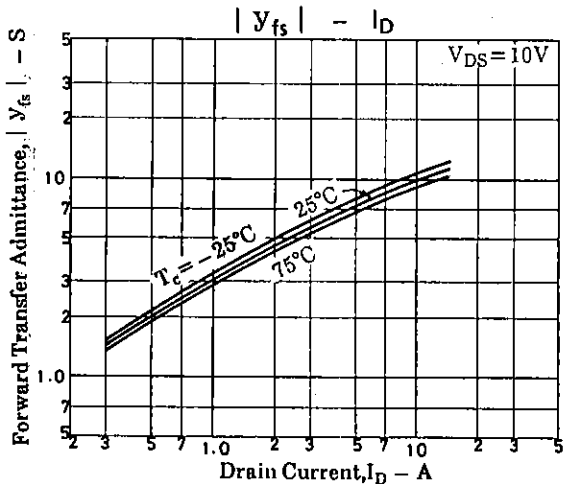
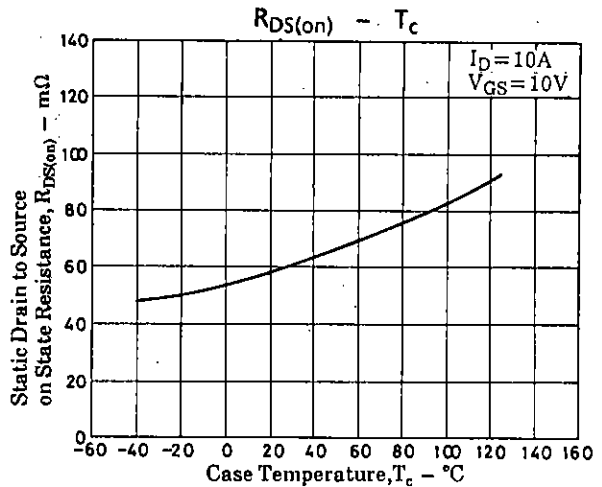
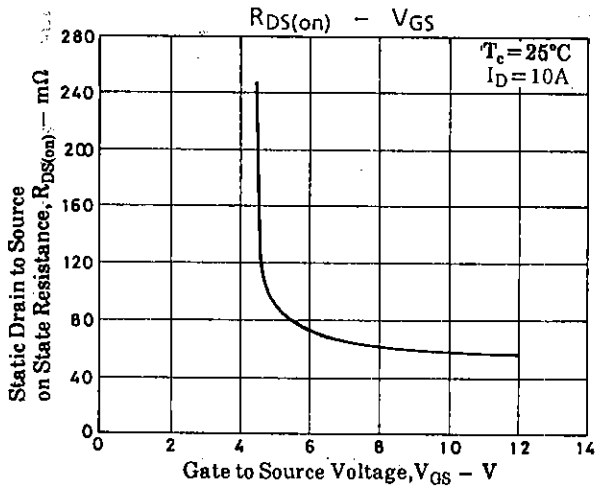
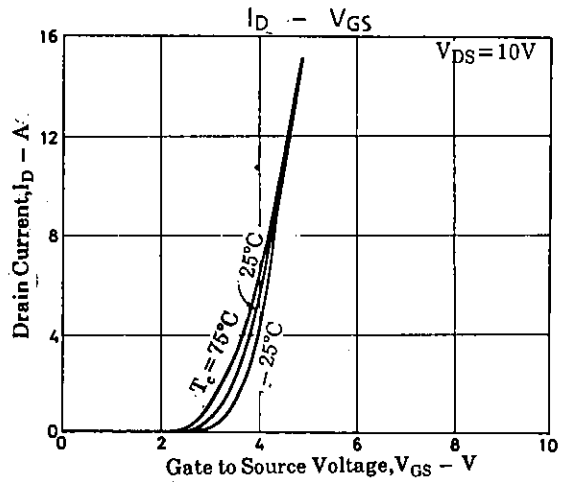
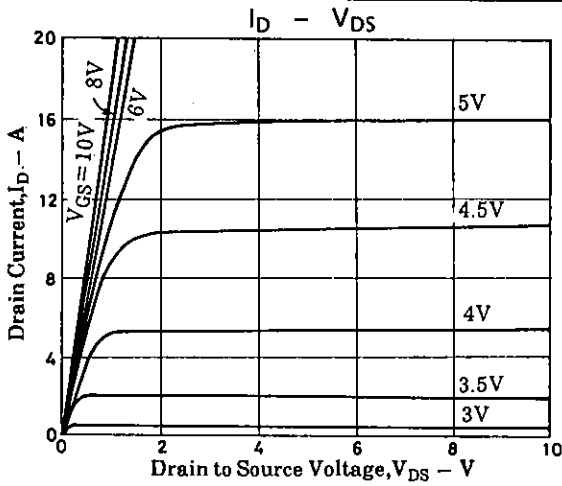
### Switching Time Test Circuit

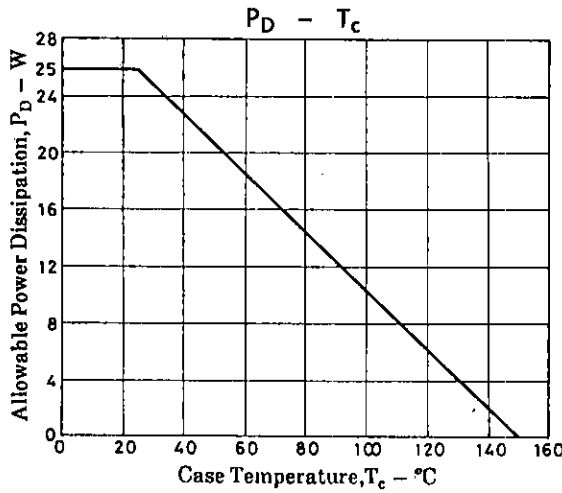
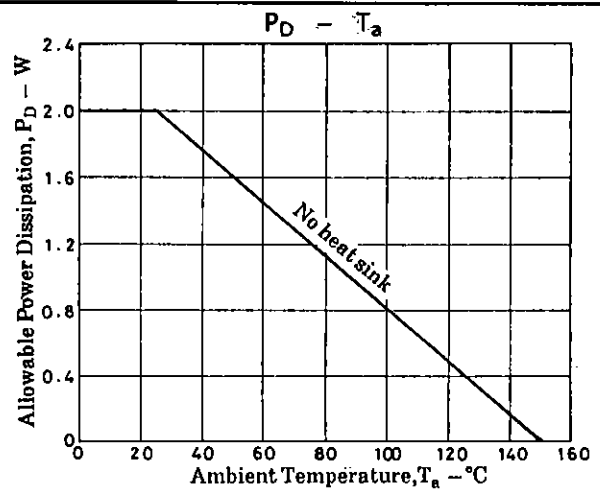
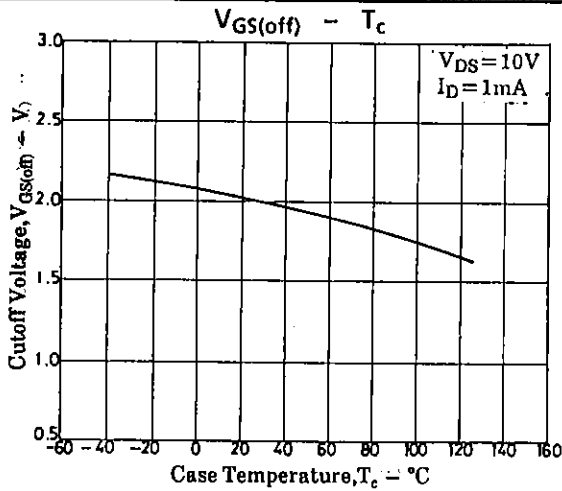


### Package Dimensions 2063 (unit: mm)



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