



No.4208

2SK1897

N-Channel MOS Silicon FET

Very High-Speed
Switching Applications

Features

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

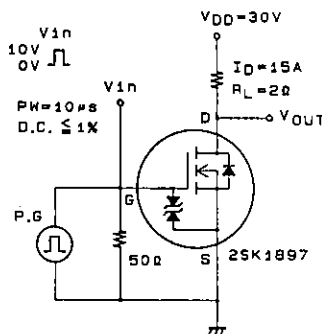
Absolute Maximum Ratings at Ta = 25°C

			unit
Drain to Source Voltage	V _{DS}	60	V
Gate to Source Voltage	V _{GSS}	±15	V
Drain Current(DC)	I _D	25	A
Drain Current(Pulse)	I _{DP}	PW ≤ 10μs, duty cycle ≤ 1%	100 A
Allowable Power Dissipation	P _D	2.0	W
		T _c = 25°C	30 W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

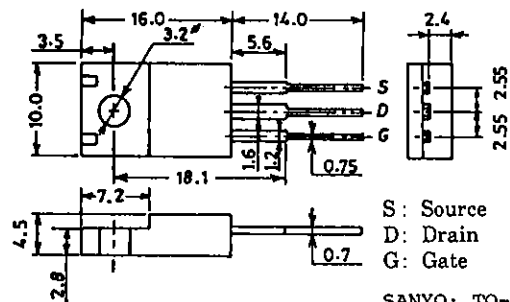
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = 1mA, V _{GS} = 0	60			V
G-S Breakdown Voltage	V _{(BR)GSS}	I _G = ±100μA, V _{DS} = 0	±15			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} = ±12V, V _{DS} = 0			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} = 10V, I _D = 1mA	1.0		2.0	V
Forward Transfer Admittance	Y _{fs}	V _{DS} = 10V, I _D = 15A	16	27		S
Static Drain to Source on State Resistance	R _{DS(on)}	I _D = 15A, V _{GS} = 10V		30	40	mΩ
	R _{DS(on)}	I _D = 15A, V _{GS} = 4V		40	55	mΩ
Input Capacitance	C _{iss}	V _{DS} = 20V, f = 1MHz		1900		pF
Output Capacitance	C _{oss}	V _{DS} = 20V, f = 1MHz		500		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = 20V, f = 1MHz		100		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		15		ns
Rise Time	t _r	"		30		ns
Turn-OFF Delay Time	t _{d(off)}	"		335		ns
Fall Time	t _f	"		225		ns
Diode Forward Voltage	V _{SD}	I _S = 25A, V _{GS} = 0	1.0	1.5		V

Switching Time Test Circuit



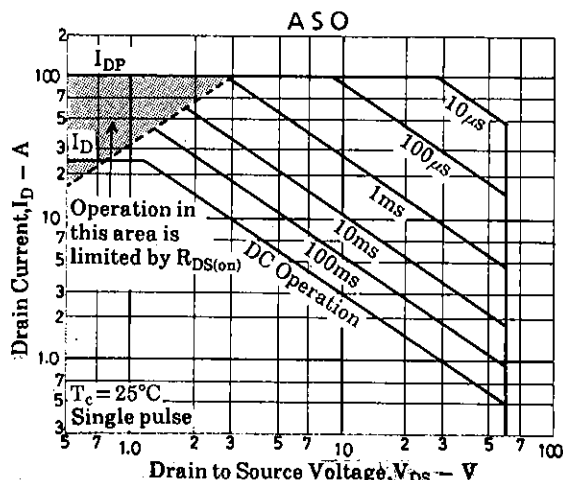
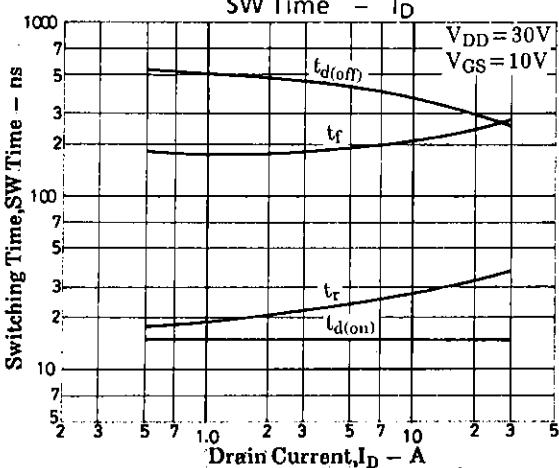
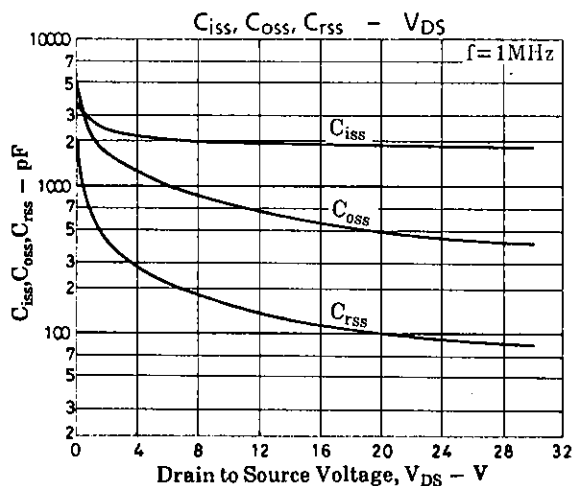
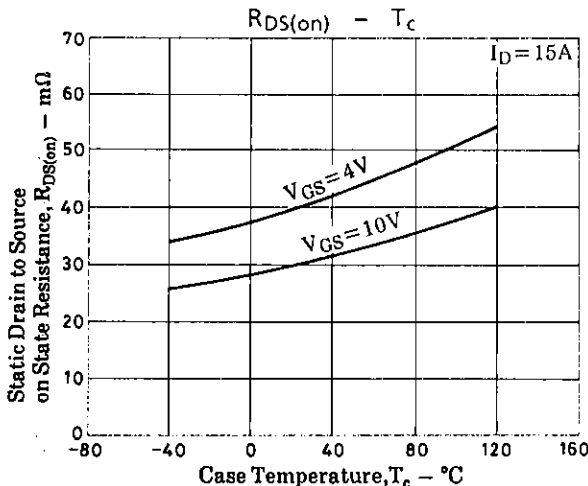
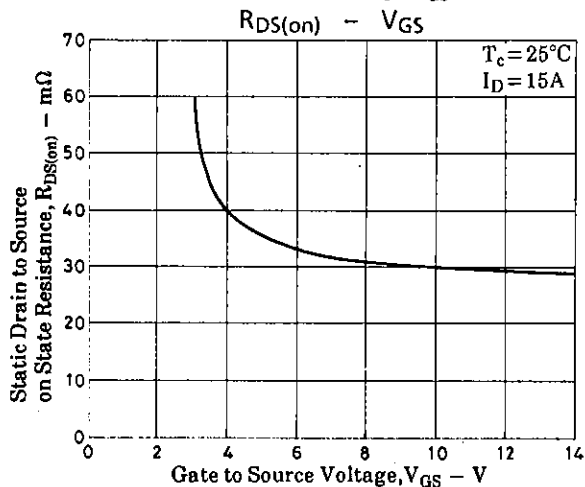
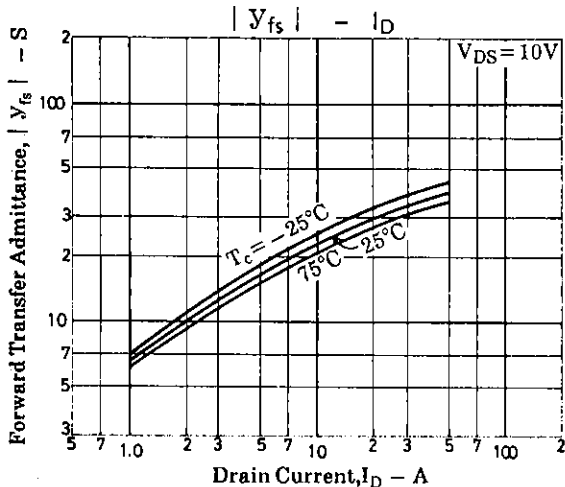
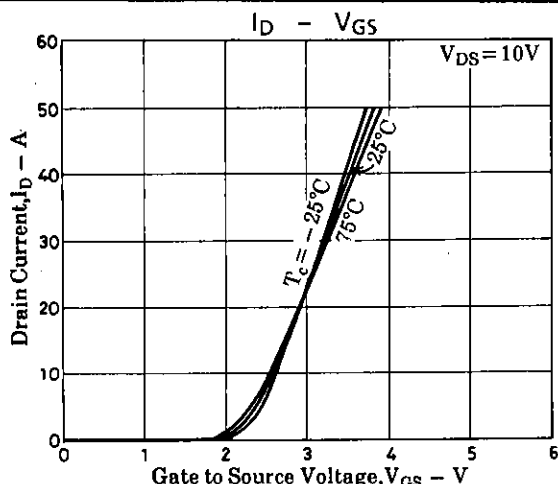
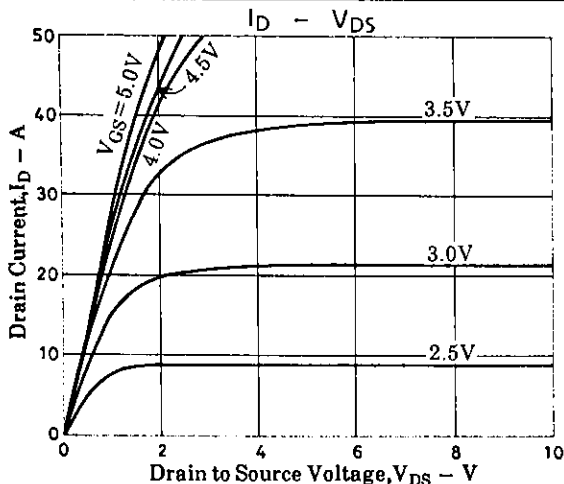
Package Dimensions 2063 (unit: mm)

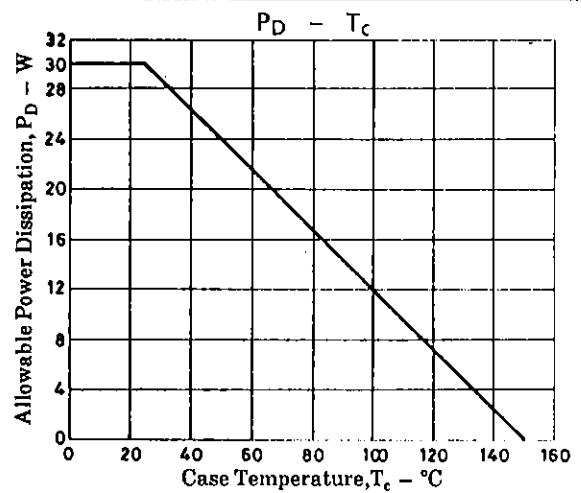
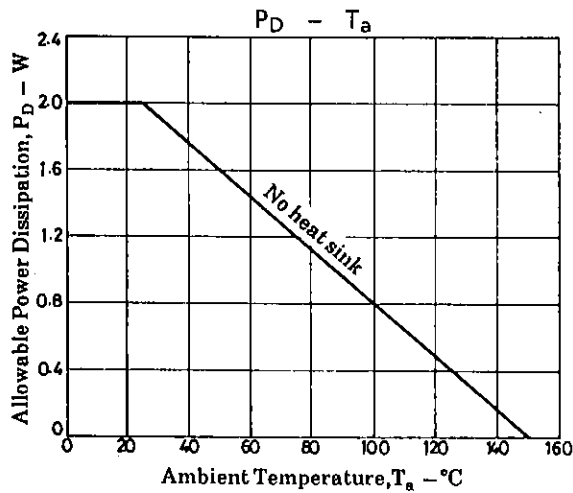


S: Source
D: Drain
G: Gate

SANYO: TO-220ML

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