

<b>SANYO</b>	No.4204	<b>2SK1888</b>
		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.

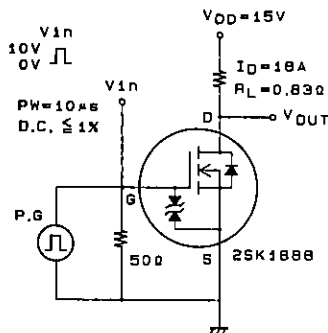
**Absolute Maximum Ratings at Ta = 25°C**

Drain to Source Voltage	$V_{DSS}$		30	V	unit
Gate to Source Voltage	$V_{GSS}$		±15	V	
Drain Current(DC)	$I_D$		30	A	
Drain Current(Pulse)	$I_{DP}$	$PW \leq 10 \mu s, \text{ duty cycle} \leq 1\%$	120	A	
Allowable Power Dissipation	$P_D$		2.0	W	
		$T_c = 25^\circ C$	30	W	
Channel Temperature	$T_{ch}$		150	°C	
Storage Temperature	$T_{stg}$		-55 to +150	°C	

**Electrical Characteristics at Ta = 25°C**

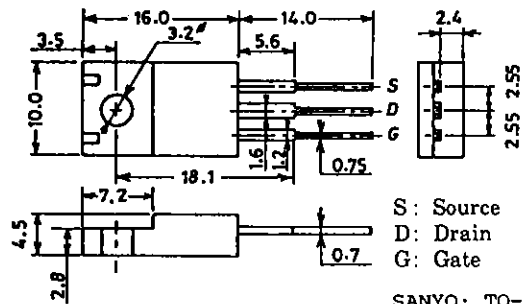
			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1mA, V_{GS} = 0$	30			V
G-S Breakdown Voltage	$V_{(BR)GSS}$	$I_G = \pm 100 \mu A, V_{DS} = 0$	±15			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = 30V, V_{GS} = 0$			100	μA
Gate to Source Leakage Current	$I_{GSS}$	$V_{GS} = \pm 12V, V_{DS} = 0$			±10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1mA$	1.0		2.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 10V, I_D = 18A$	17.5	29		S
Static Drain to Source on State Resistance	$R_{DS(on)}$	$I_D = 18A, V_{GS} = 10V$		15	25	mΩ
	$R_{DS(on)}$	$I_D = 18A, V_{GS} = 4V$		25	35	mΩ
Input Capacitance	$C_{iss}$	$V_{DS} = 10V, f = 1MHz$		2000		pF
Output Capacitance	$C_{oss}$	$V_{DS} = 10V, f = 1MHz$		1100		pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS} = 10V, f = 1MHz$		360		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		15		ns
Rise Time	$t_r$	"		40		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		380		ns
Fall Time	$t_f$	"		370		ns
Diode Forward Voltage	$V_{SD}$	$I_S = 30A, V_{GS} = 0$	1.0	1.5		V

**Switching Time Test Circuit**



**Package Dimensions 2063**

(unit : mm)

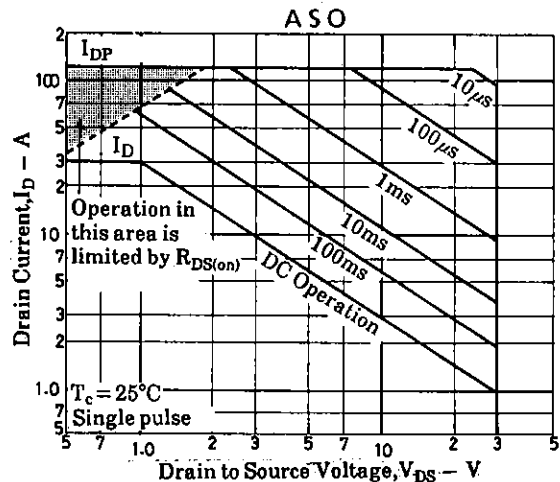
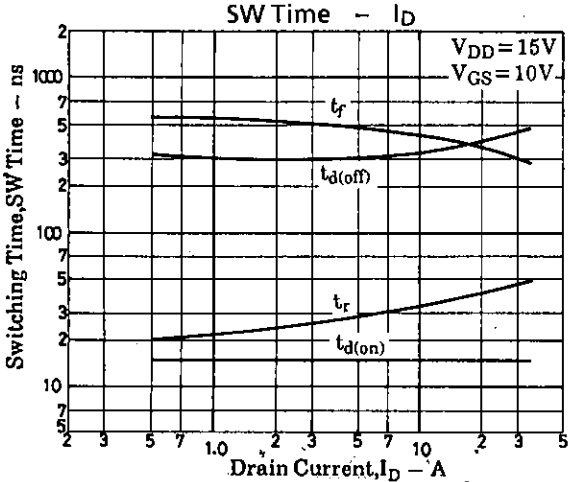
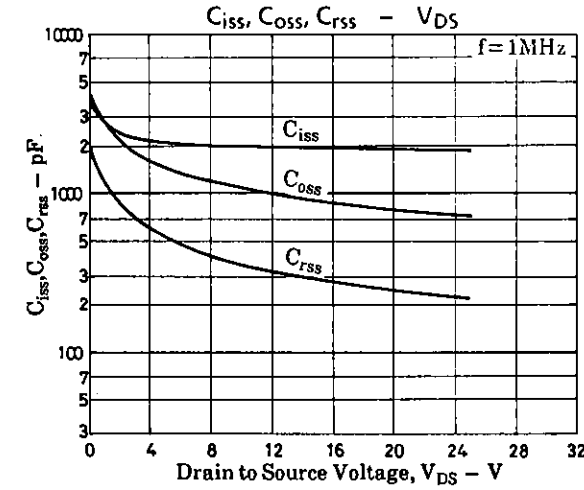
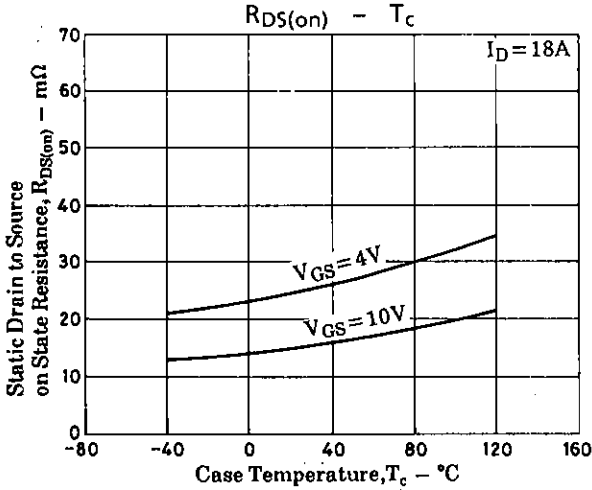
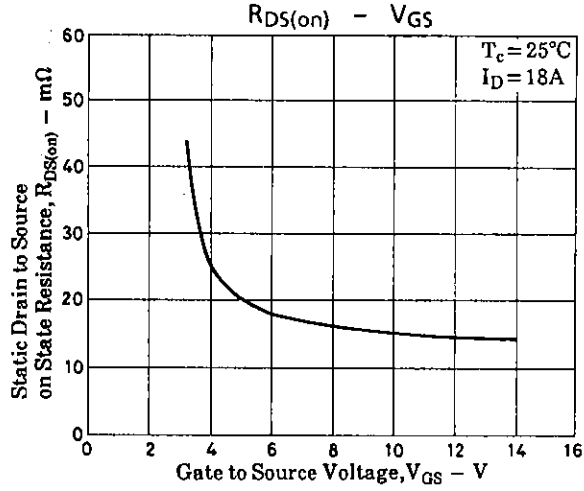
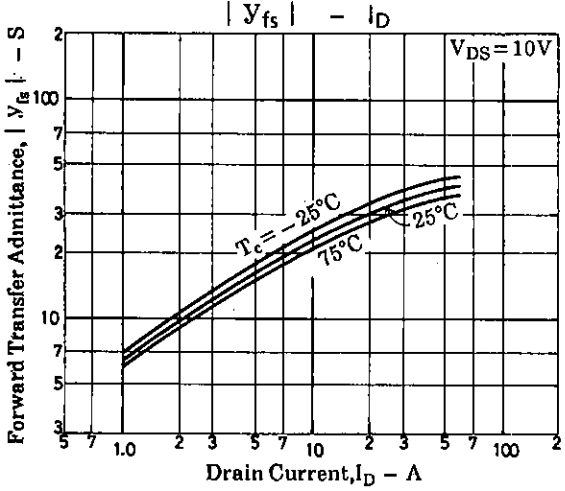
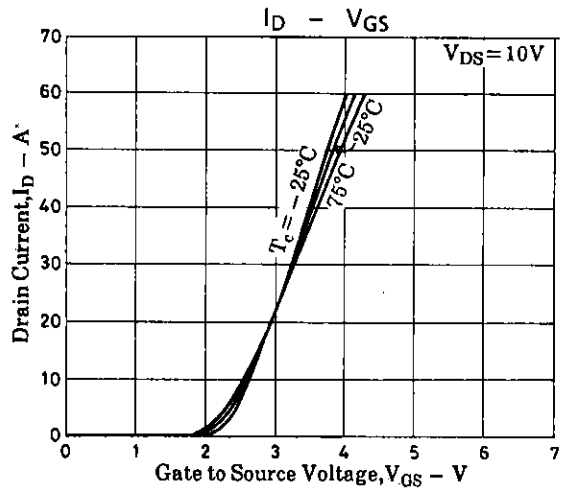
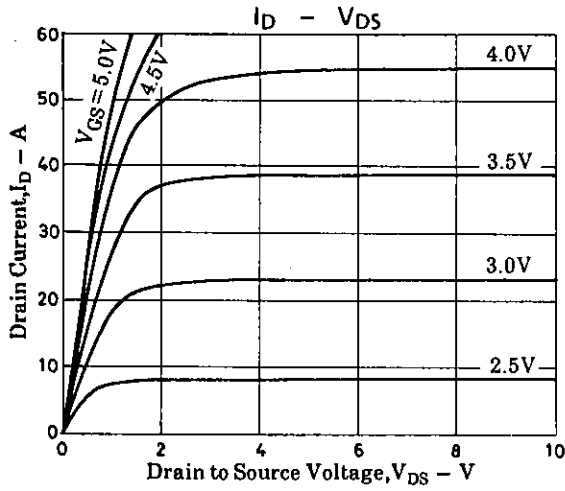


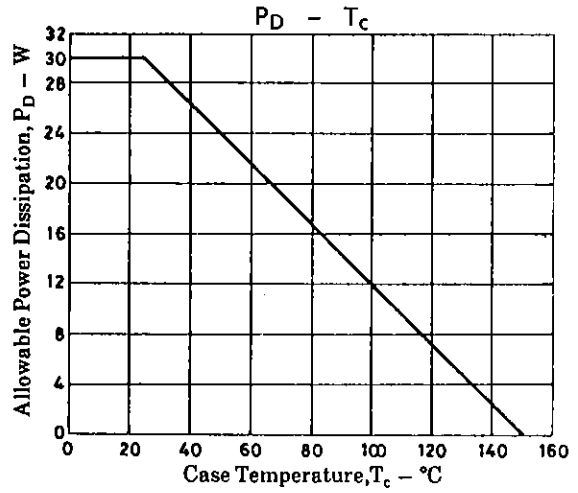
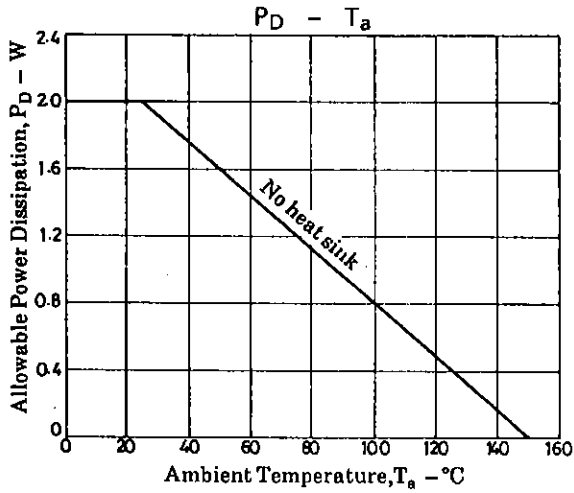
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