

SANYO	No.3761A	2SJ188
		P-Channel MOS Silicon FET

Very High-Speed Switching Applications

Features

- Low ON resistance
- Very high-speed switching
- Low-voltage drive

Absolute Maximum Ratings at Ta = 25°C

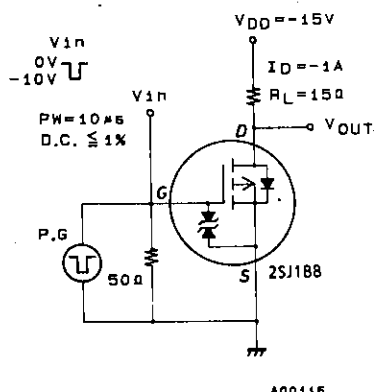
Drain to Source Voltage	V_{DS}	-30	V
Gate to Source Voltage	V_{GS}	±15	V
Drain Current (DC)	I_D	-2	A
Drain Current (Pulse)	I_{DP}	-8	A
Allowable Power Dissipation	P_D	20	W
Channel Temperature	T_{ch}	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

$PW \leq 10 \mu s$, duty cycle $\leq 1\%$
 $T_c = 25^\circ C$

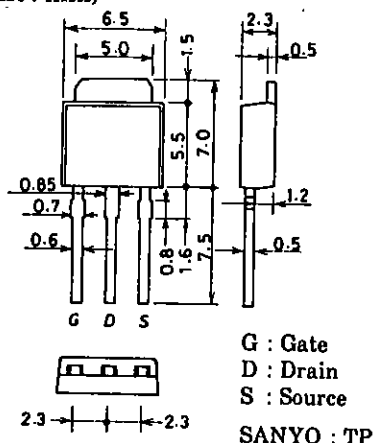
Electrical Characteristics at Ta = 25°C

			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} $	$V_{DS} = -10V, I_D = -1A$	1.2	2		S
Static Drain to Source on State Resistance	$R_{DS(on)}$	$I_D = -1A, V_{GS} = -10V$		0.2	0.3	Ω
	$R_{DS(on)}$	$I_D = -1A, V_{GS} = -4V$		0.3	0.45	Ω
Input Capacitance	C_{iss}	$V_{DS} = -10V, f = 1MHz$		400		pF
Output Capacitance	C_{oss}	$V_{DS} = -10V, f = 1MHz$		280		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -10V, f = 1MHz$		110		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit		12		ns
Rise Time	t_r	"		25		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		105		ns
Fall Time	t_f	"		75		ns
Diode Forward Voltage	V_{SD}	$I_S = -2A, V_{GS} = 0$	-1.0	-1.5		V

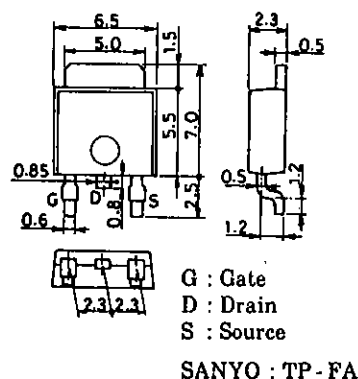
Switching Time Test Circuit



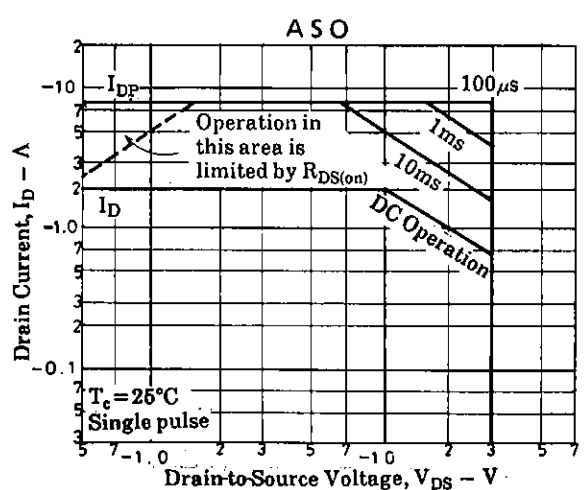
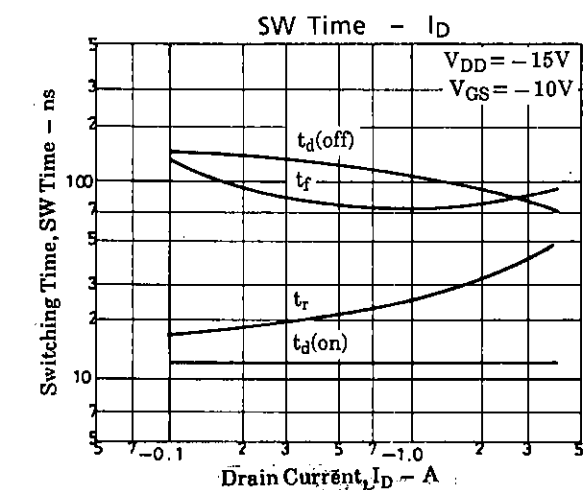
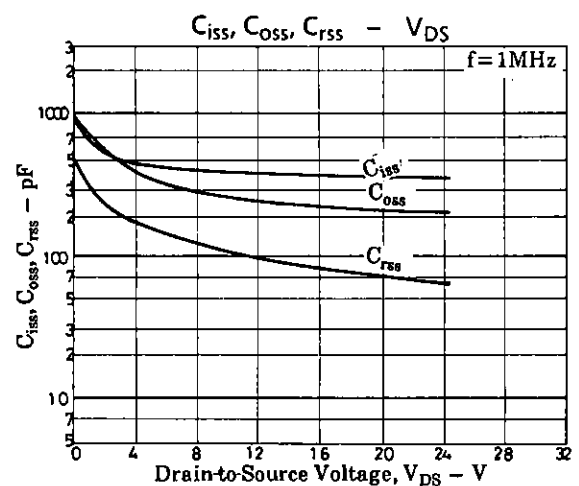
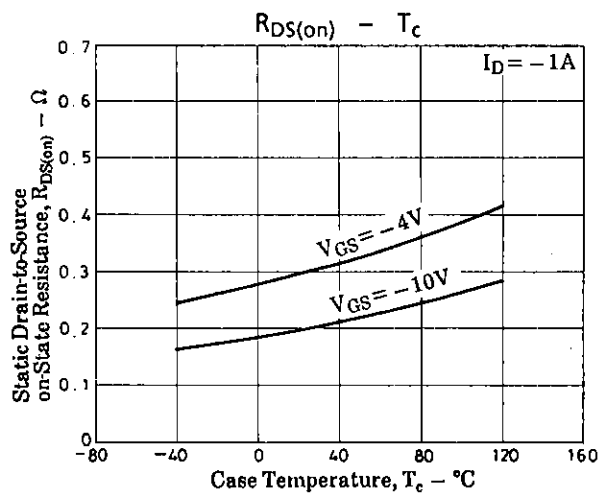
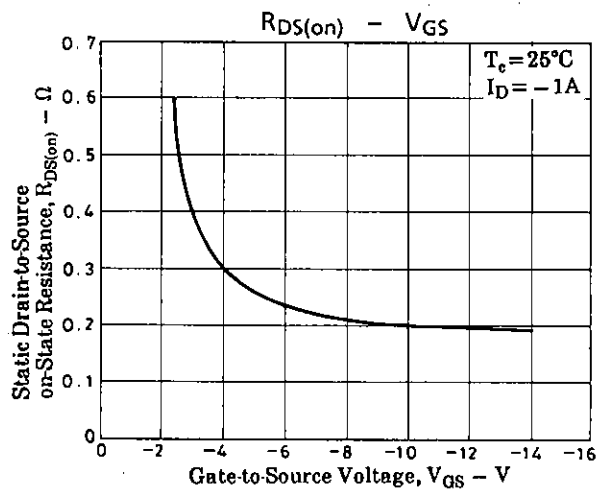
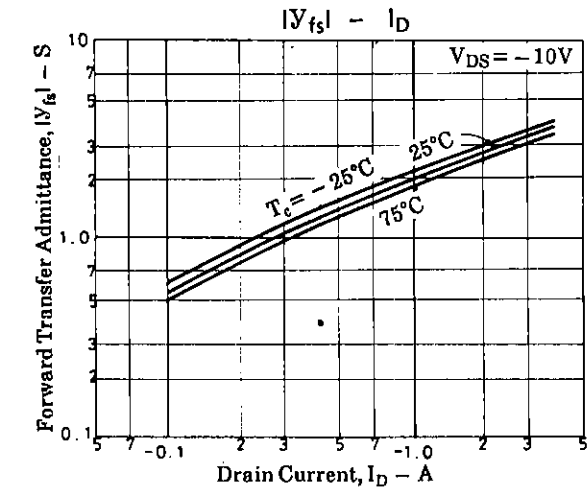
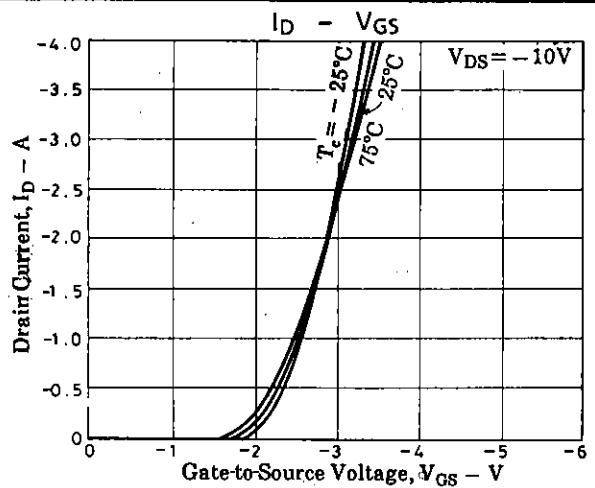
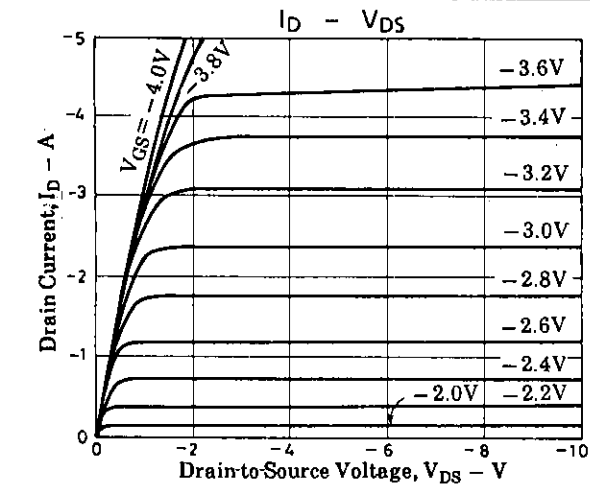
Package Dimensions 2083A (unit: mm)

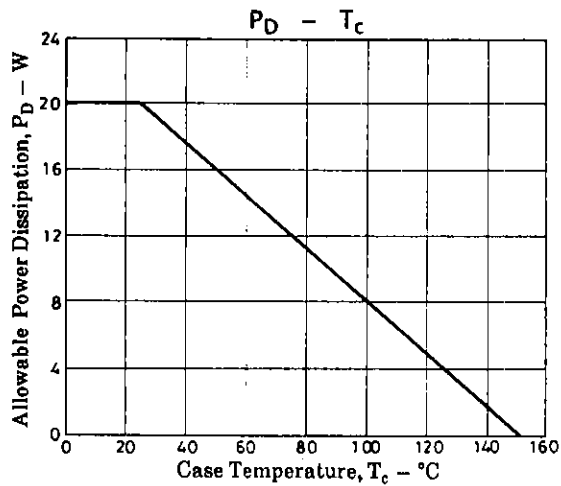


Package Dimensions 2092A (unit: mm)



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