

	No.3765	2SJ192
		P-Channel MOS Silicon FET Very High-Speed Switching Applications

Features

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

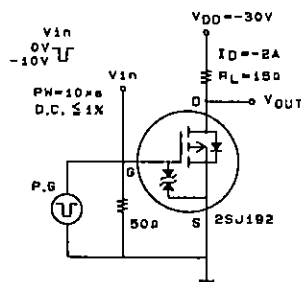
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

			unit
Drain to Source Voltage	V_{DS}	-60	V
Gate to Source Voltage	V_{GS}	± 15	V
Drain Current(DC)	I_D	-4	A
Drain Current(Pulse)	I_{DP}	$PW \leq 10\mu s, \text{ duty cycle} \leq 1\%$	A
Allowable Power Dissipation	P_D	$T_c = 25^\circ\text{C}$	30 W
Channel Temperature	T_{ch}	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

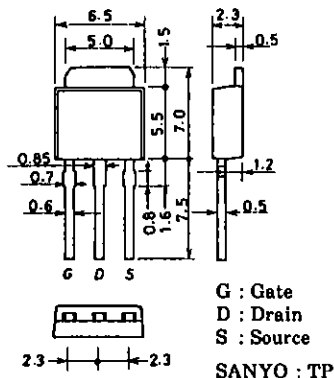
Electrical Characteristics at $T_a = 25^\circ\text{C}$

			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -1\text{mA}, V_{GS} = 0$	-60			V
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}	$V_{DS} = -60\text{V}, V_{GS} = 0$			-100	μA
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = \pm 12\text{V}, V_{DS} = 0$			± 10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = -10\text{V}, I_D = -1\text{mA}$	-1.0		-2.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = -10\text{V}, I_D = -2\text{A}$	2.5	4		S
Static Drain to Source on State Resistance	$R_{DS(on)}$	$I_D = -2\text{A}, V_{GS} = -10\text{V}$		0.15	0.2	Ω
	$R_{DS(on)}$	$I_D = -2\text{A}, V_{GS} = -4\text{V}$		0.2	0.27	Ω
Input Capacitance	C_{iss}	$V_{DS} = -20\text{V}, f = 1\text{MHz}$		950		pF
Output Capacitance	C_{oss}	$V_{DS} = -20\text{V}, f = 1\text{MHz}$		300		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -20\text{V}, f = 1\text{MHz}$		75		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit		15		ns
Rise Time	t_r	"		35		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		115		ns
Fall Time	t_f	"		95		ns
Diode Forward Voltage	V_{SD}	$I_S = -4\text{A}, V_{GS} = 0$	-1.0	-1.5		V

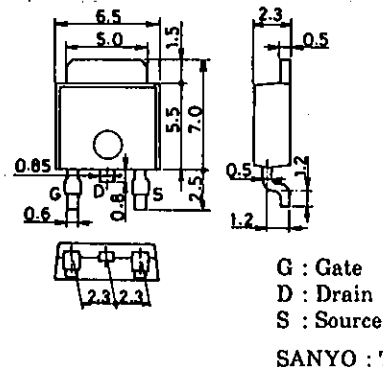
Switching Time Test Circuit



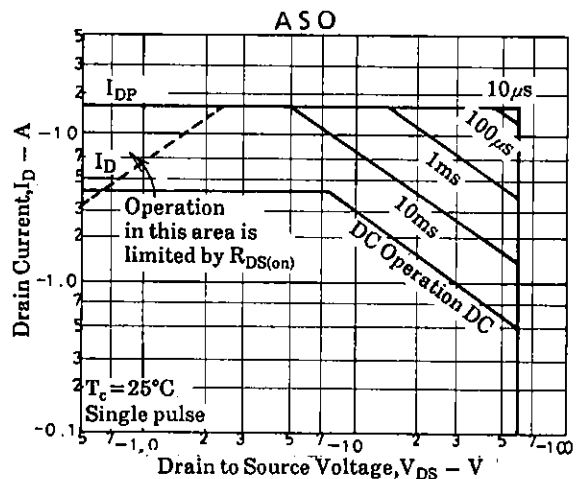
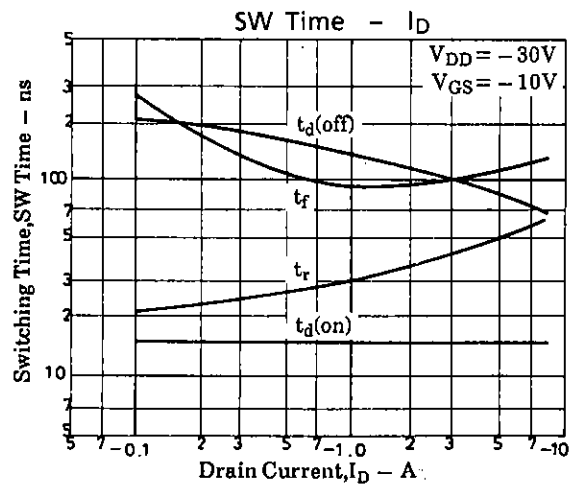
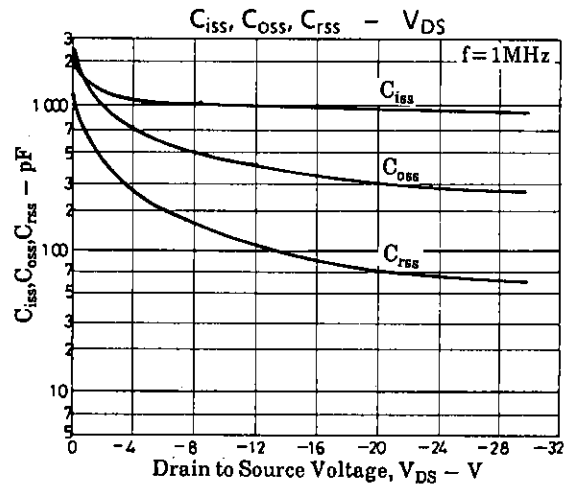
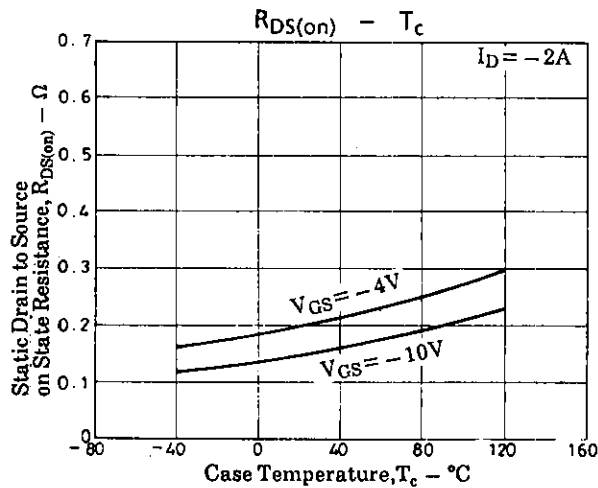
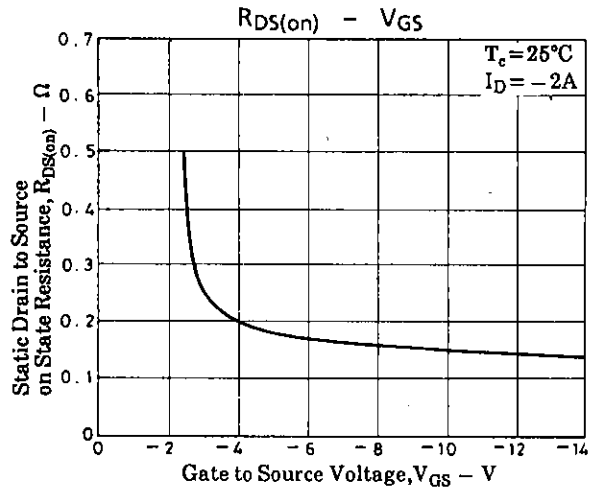
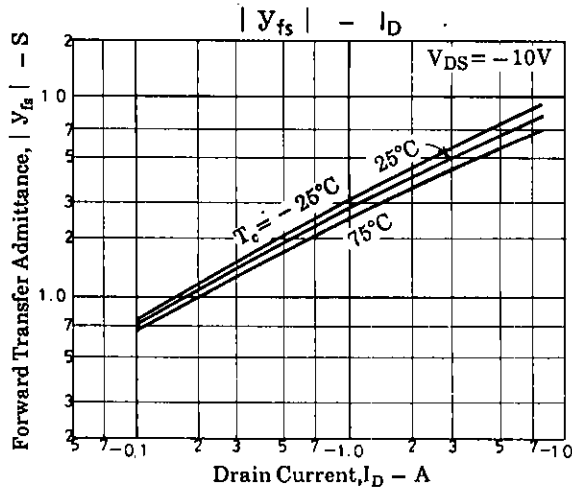
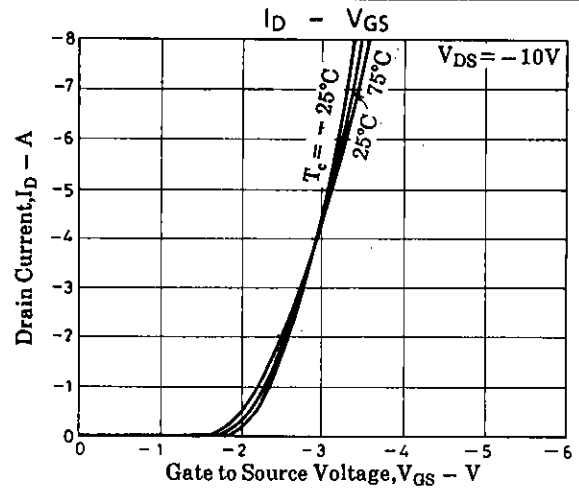
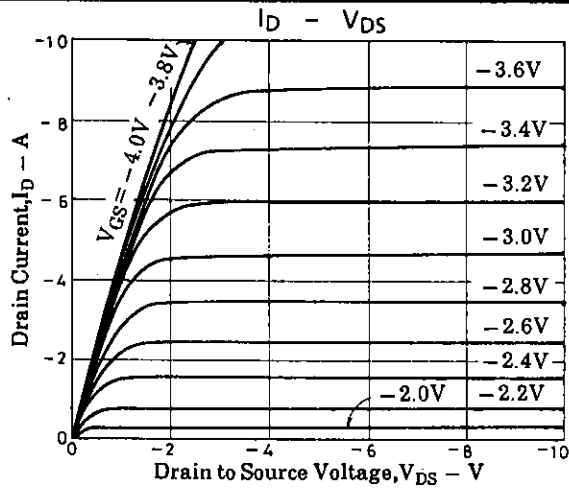
Package Dimensions 2083A (unit: mm)

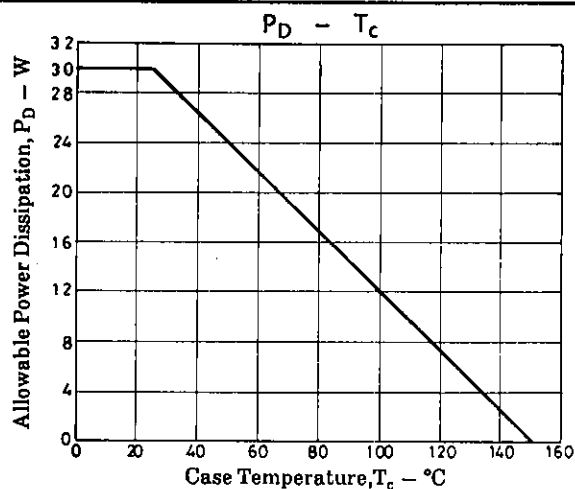


Package Dimensions 2092A (unit: mm)



G : Gate
D : Drain
S : Source
SANYO : TP - FA





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