



No.4669

2SJ337

P-Channel MOS Silicon FET

Very High-Speed Switching Applications

Features

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

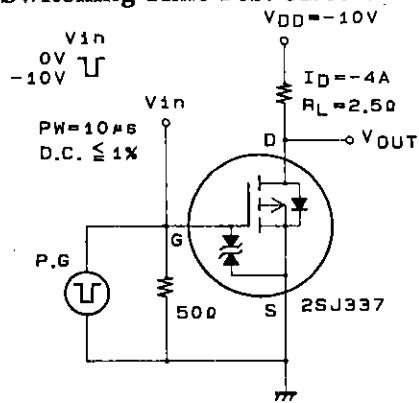
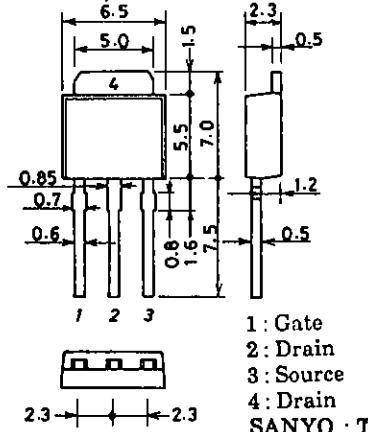
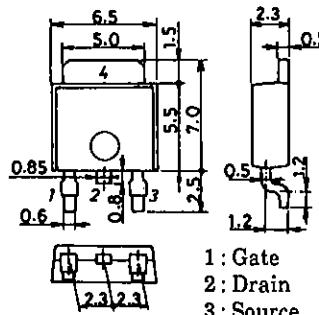
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

		unit
Drain-to-Source Voltage	V_{DSS}	-12 V
Gate-to-Source Voltage	V_{GSS}	± 18 V
Drain Current(DC)	I_D	-8 A
Drain Current(Pulse)	I_{DP}	$PW \leq 10\mu\text{s}$, duty cycle $\leq 1\%$ -32 A
Allowable Power Dissipation	P_D	1 W
	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	$V_{(BR)DSS}$	$I_D = -1\text{mA}, V_{GS} = 0$	-12			V
G-S Breakdown Voltage	$V_{(BR)GSS}$	$I_G = \pm 100\mu\text{A}, V_{DS} = 0$	± 18			V
Zero-Gate Voltage	I_{DSS}	$V_{DS} = -12\text{V}, V_{GS} = 0$			-100	μA
Drain Current						
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = \pm 12\text{V}, V_{DS} = 0$			± 10	μA
Cutoff Voltage	$V_{GS(\text{off})}$	$V_{DS} = -10\text{V}, I_D = -1\text{mA}$	-1.0		-2.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = -10\text{V}, I_D = -4\text{A}$	4	6		S
Static Drain-to-Source	$R_{DS(\text{on})}$	$I_D = -4\text{A}, V_{GS} = -10\text{V}$			65	$\text{m}\Omega$
ON-State Resistance	$R_{DS(\text{on})}$	$I_D = -4\text{A}, V_{GS} = -4\text{V}$			110	$\text{m}\Omega$
Input Capacitance	C_{iss}	$V_{DS} = -10\text{V}, f = 1\text{MHz}$			1000	pF
Output Capacitance	C_{oss}	$V_{DS} = -10\text{V}, f = 1\text{MHz}$			900	pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -10\text{V}, f = 1\text{MHz}$			220	pF
Turn-ON Delay Time	$t_{d(\text{on})}$	See specified Test Circuit.			15	ns
Rise Time	t_r	"			50	ns
Turn-OFF Delay Time	$t_{d(\text{off})}$	"			220	ns
Fall Time	t_f	"			145	ns
Diode Forward Voltage	V_{SD}	$I_S = -8\text{A}, V_{GS} = 0$			-1.0	-1.5 V

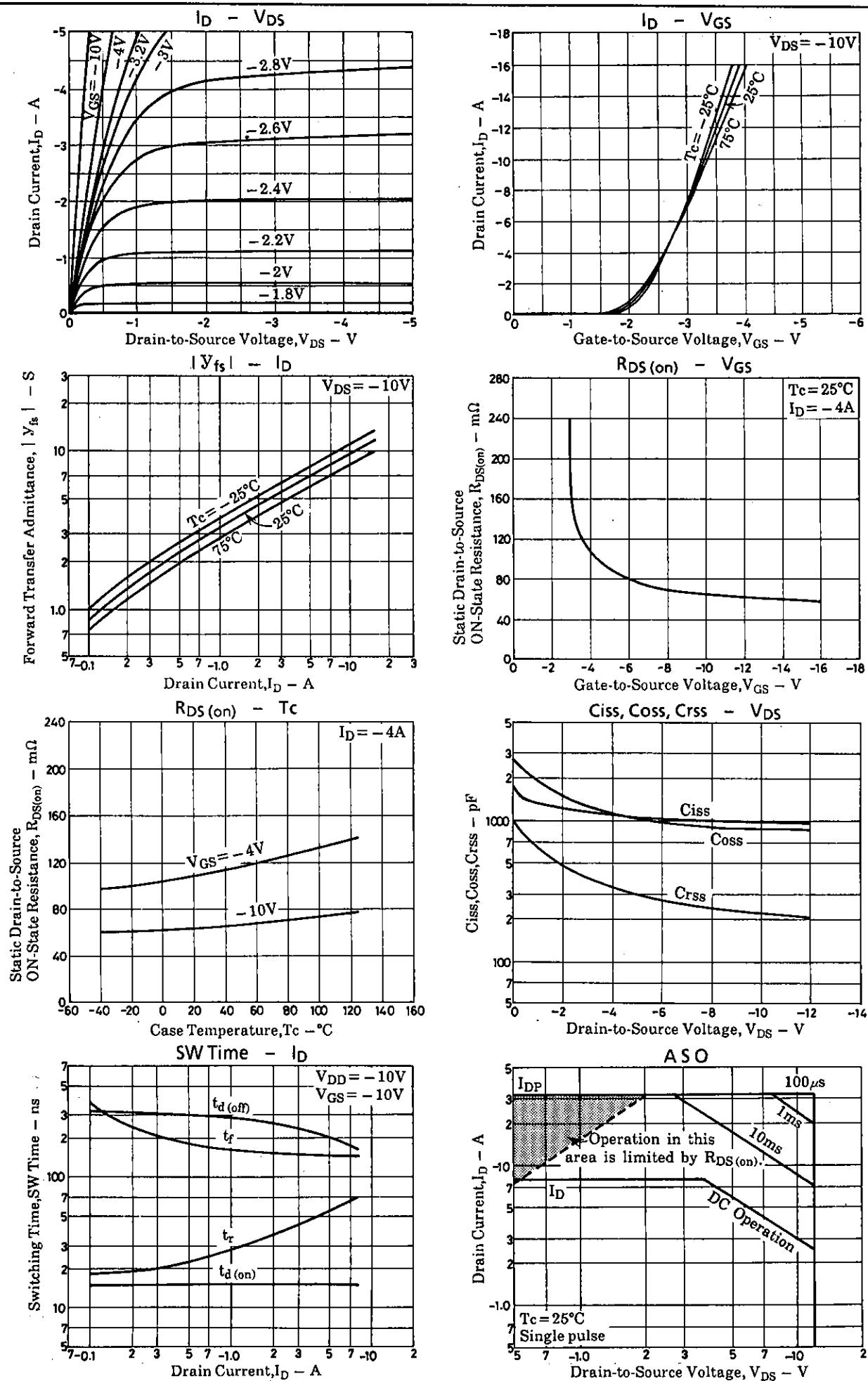
Switching Time Test Circuit

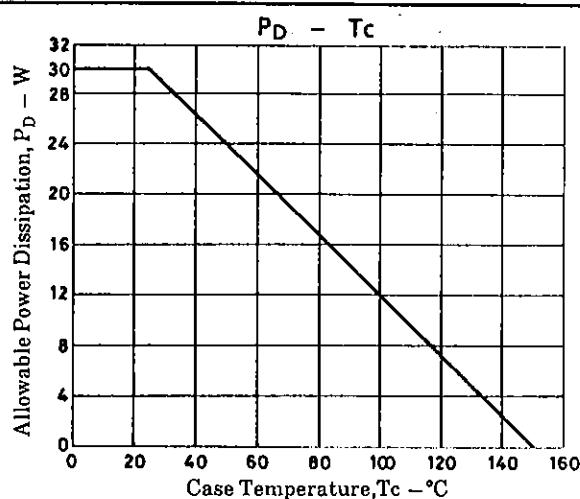
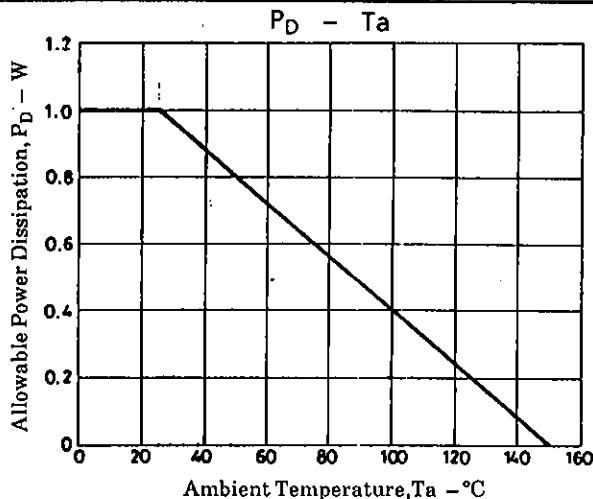
Package Dimensions 2083B
(unit : mm)Package Dimensions 2092B
(unit : mm)

1 : Gate
2 : Drain
3 : Source
4 : Drain
SANYO : TP

1 : Gate
2 : Drain
3 : Source
4 : Drain
SANYO : TP-FA

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