

SANYO	No.5297A	2S2S383
		P-Channel MOS Silicon FET

Ultrahigh-Speed Switching Applications

Features

- Low ON resistance.
- Ultrahigh-speed switching.
- 2.5V drive.

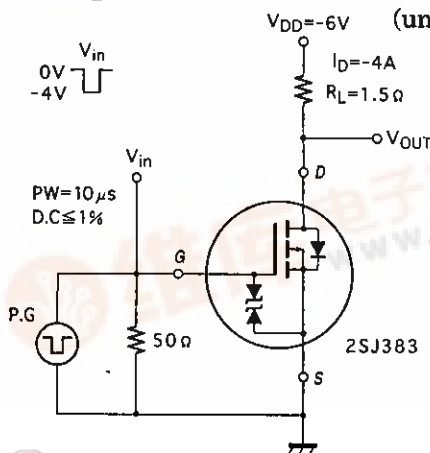
Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Condition	Value	Unit
Drain-to-Source Voltage	V_{DSS}		-12	V
Gate-to-Source Voltage	V_{GSS}		± 10	V
Drain Current (DC)	I_D		-8	A
Drain Current (Pulse)	I_{DP}	$PW \leq 10\mu s, \text{ duty cycle} \leq 1\%$	-32	A
Allowable Power Dissipation	P_D		1.0	W
		$T_c = 25^\circ C$	30	W
Channel Temperature	T_{ch}		150	$^\circ C$
Storage Temperature	T_{stg}		-55 to +150	$^\circ C$

Electrical Characteristics at Ta = 25°C

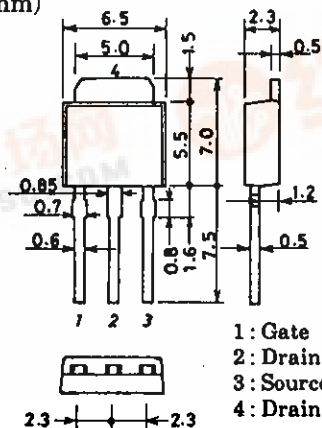
Parameter	Symbol	Condition	min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -1mA, V_{GS} = 0$	-12			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -10V, V_{GS} = 0$			-100	μA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = \pm 8V, V_{DS} = 0$			± 10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = -6V, I_D = -1mA$	-0.4		-1.4	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = -6V, I_D = -4A$	6	8		S
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}$	$I_D = -4A, V_{GS} = -4V$		65	82	m Ω
	$R_{DS(on)}$	$I_D = -2A, V_{GS} = -2.5V$		90	144	m Ω
Input Capacitance	C_{iss}	$V_{DS} = -6V, f = 1MHz$		1000		pF
Output Capacitance	C_{oss}	$V_{DS} = -6V, f = 1MHz$		800		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -6V, f = 1MHz$		270		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		25		ns
Rise Time	t_r	"		170		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		180		ns
Fall Time	t_f	"		270		ns
Diode Forward Voltage	V_{SD}	$I_S = -8A, V_{GS} = 0$	-1.0	-1.2		V

Switching Time Test Circuit



Package Dimensions 2083B

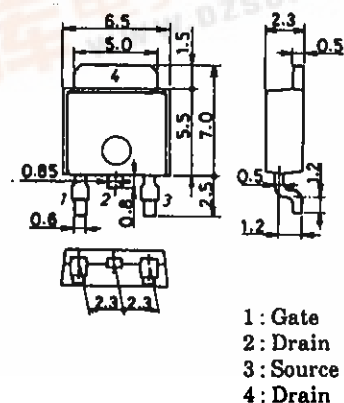
(unit : mm)



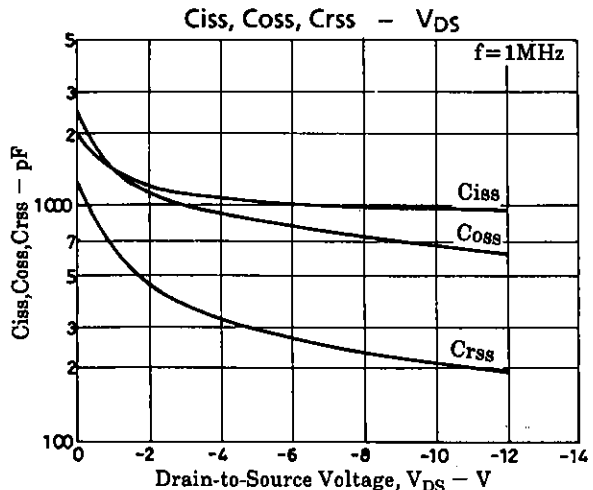
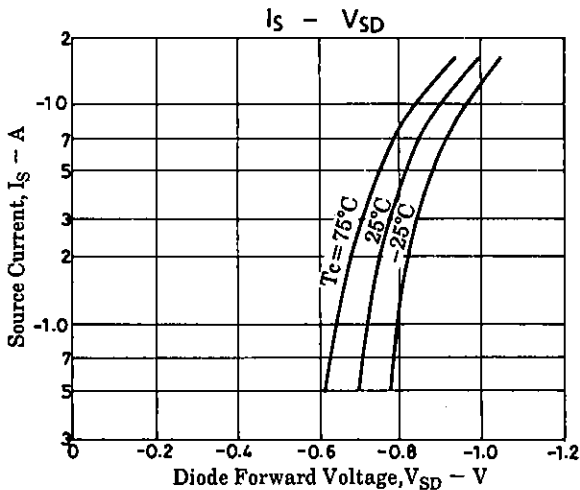
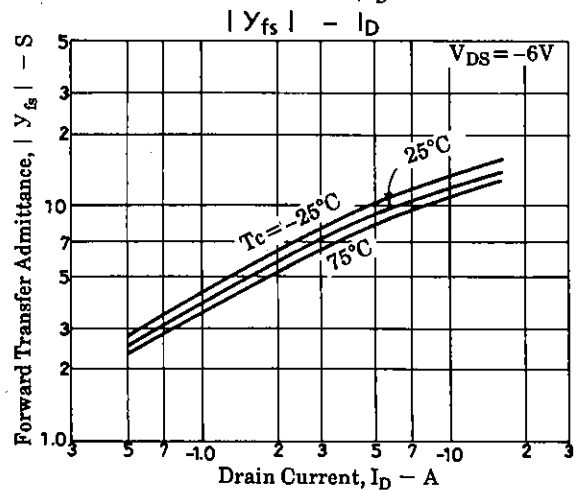
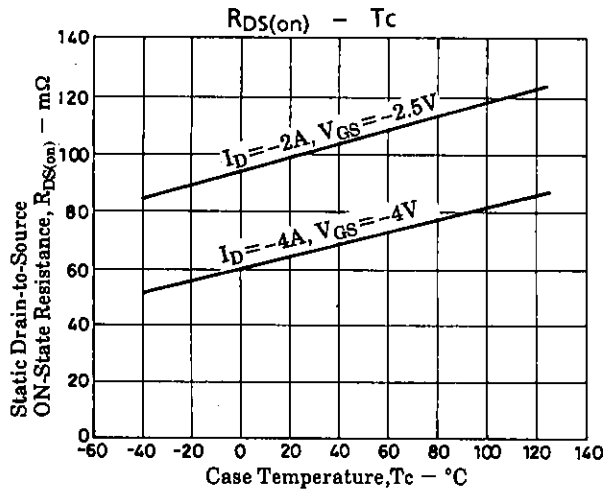
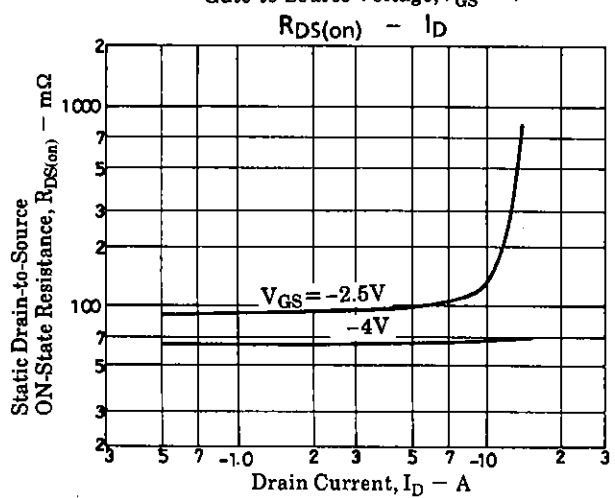
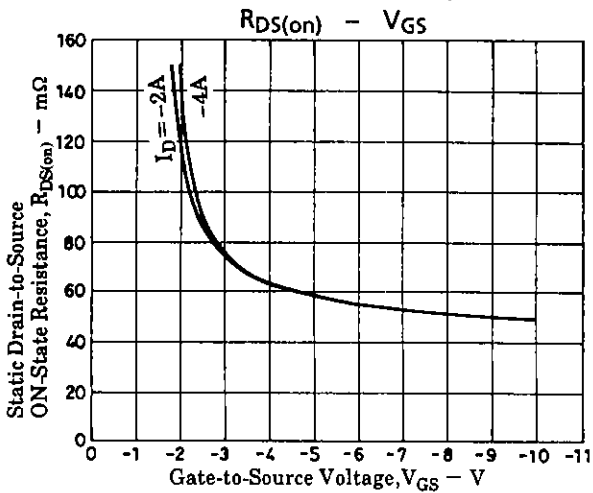
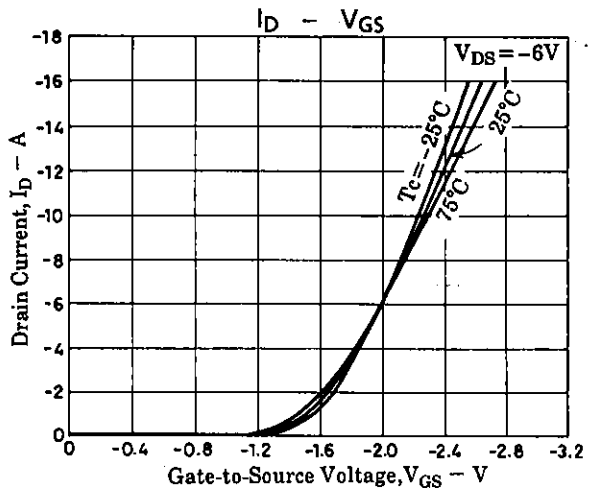
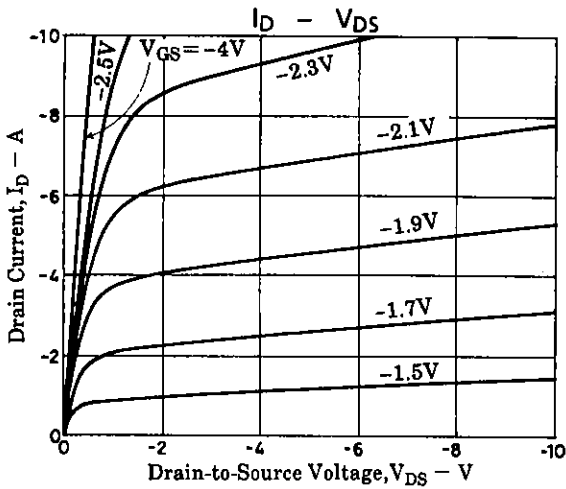
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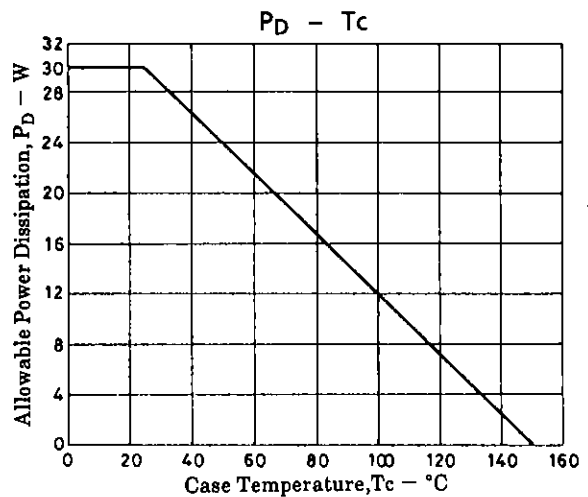
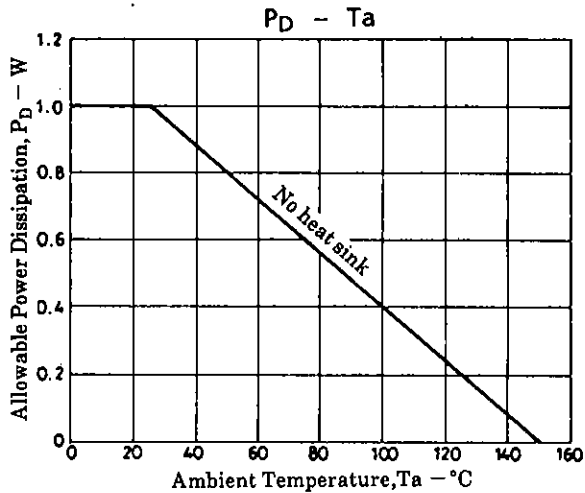
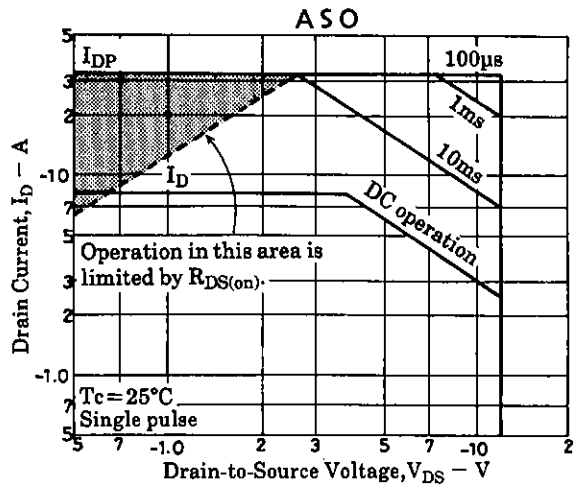
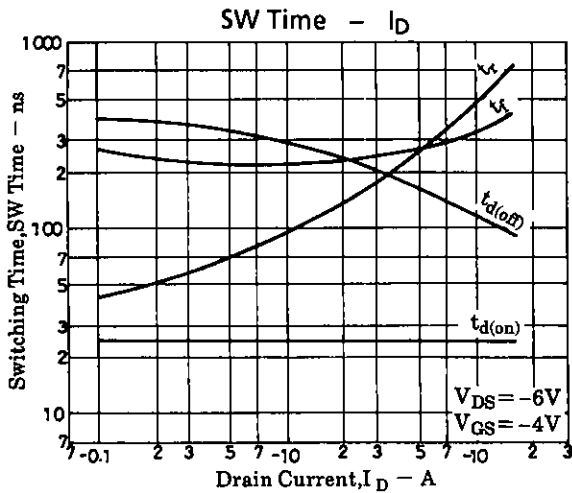
Package Dimensions 2092B

(unit : mm)



SANYO : TP-FA





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