

<b>SANYO</b>	No.5057	<b>2SJ382</b>
		P-Channel MOS Silicon FET Very High-Speed Switching Applications

**Features**

- Low ON resistance.
- Very high-speed switching.
- 2.5V drive.

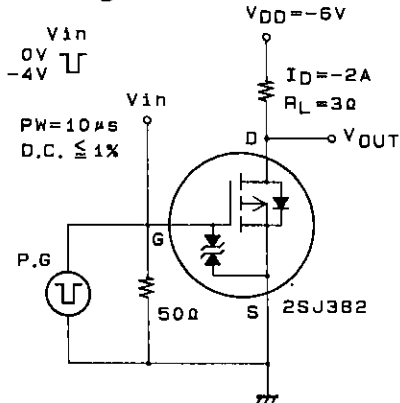
**Absolute Maximum Ratings at Ta = 25°C**

			unit
Drain-to-Source Voltage	V <sub>DSS</sub>	-12	V
Gate-to-Source Voltage	V <sub>GSS</sub>	±10	V
Drain Current (DC)	I <sub>D</sub>	-4	A
Drain Current (Pulse)	I <sub>DP</sub>	PW ≤ 10μs, duty cycle ≤ 1%	-16 A
Allowable Power Dissipation	P <sub>D</sub>		1 W
		T <sub>c</sub> = 25°C	20 W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

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

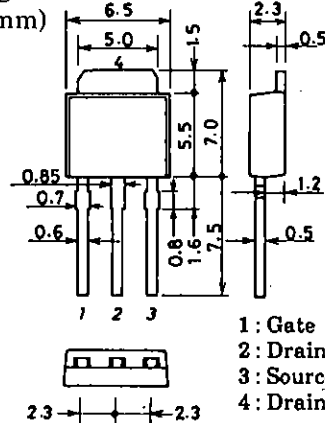
			min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = -1mA, V <sub>GS</sub> = 0	-12			V
Zero-Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = -10V, V <sub>GS</sub> = 0			-100	μA
Gate-to-Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> = ±8V, V <sub>DS</sub> = 0			±10	μA
Gate-to-Source Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> = -6V, I <sub>D</sub> = -1mA	-0.5		-1.5	V
Forward Transfer Admittance	Y <sub>fs</sub>	V <sub>DS</sub> = -6V, I <sub>D</sub> = -2A	2.5	4		S
Static Drain-to-Source ON-State Resistance	R <sub>DSS(on)</sub>	I <sub>D</sub> = -2A, V <sub>GS</sub> = -4V		135	177	mΩ
	R <sub>DSS(on)</sub>	I <sub>D</sub> = -1A, V <sub>GS</sub> = -2.5V		185	300	mΩ
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = -6V, f = 1MHz		400		pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = -6V, f = 1MHz		370		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = -6V, f = 1MHz		160		pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See specified Test Circuit.		20		ns
Rise Time	t <sub>r</sub>	"		120		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	"		140		ns
Fall Time	t <sub>f</sub>	"		180		ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = -4A, V <sub>GS</sub> = 0	-1.0	-1.2		V

**Switching Time Test Circuit**



**Package Dimensions 2083B**

(unit: mm)

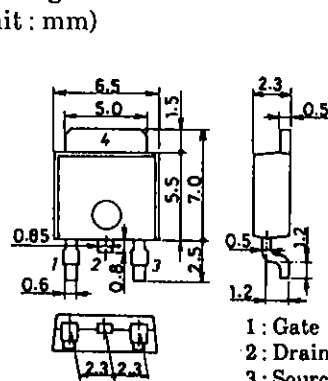


- 1: Gate
- 2: Drain
- 3: Source
- 4: Drain

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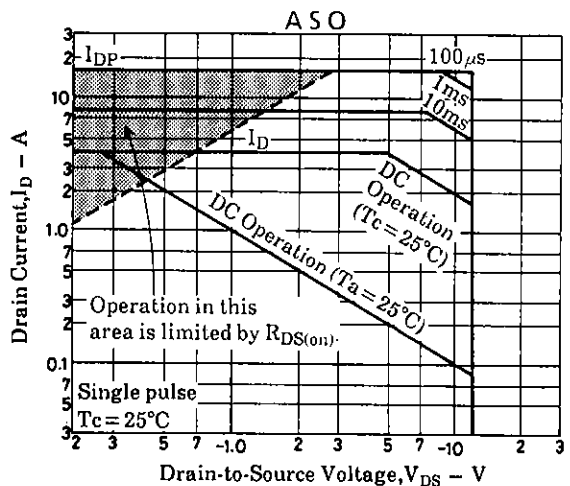
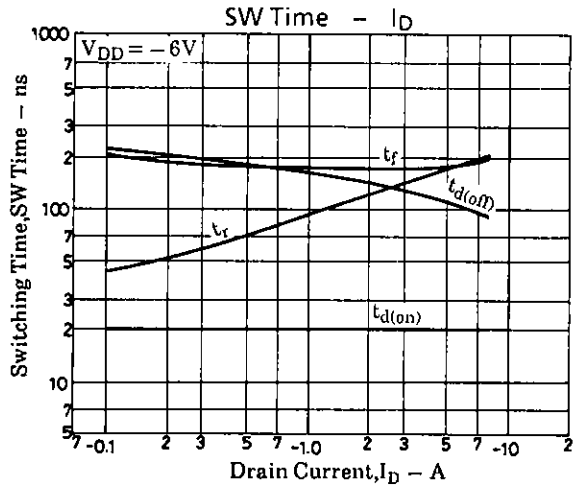
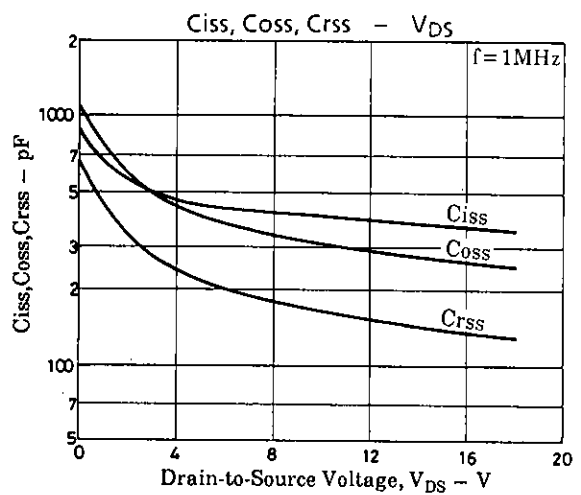
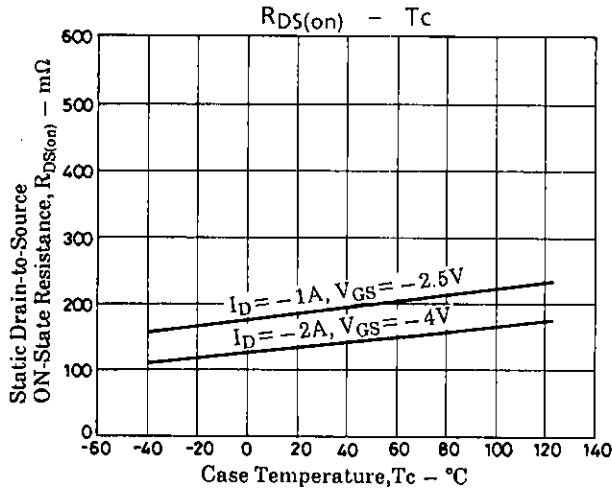
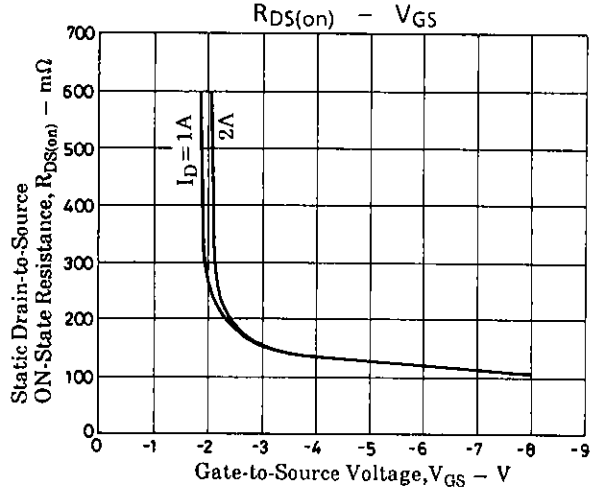
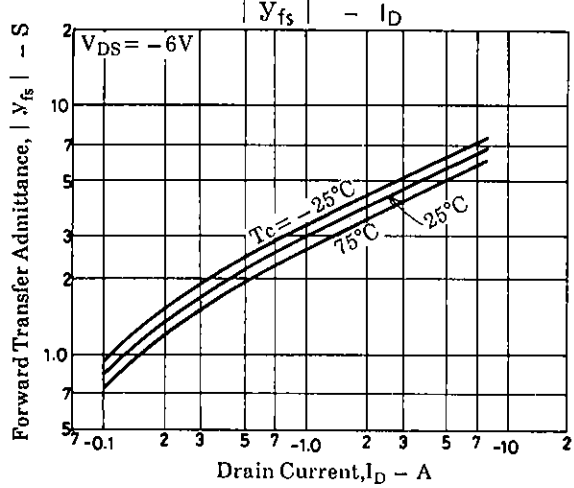
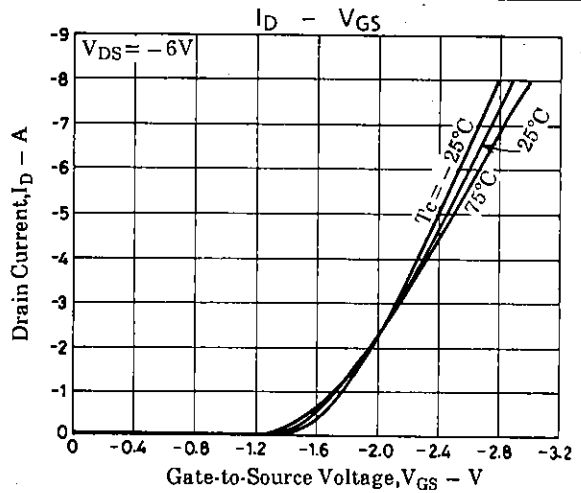
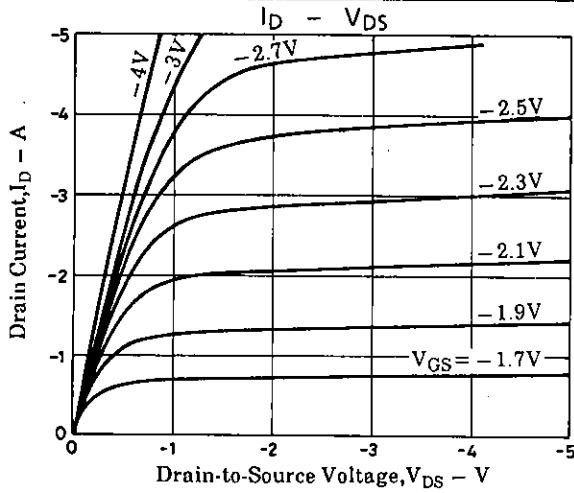
**Package Dimensions 2092B**

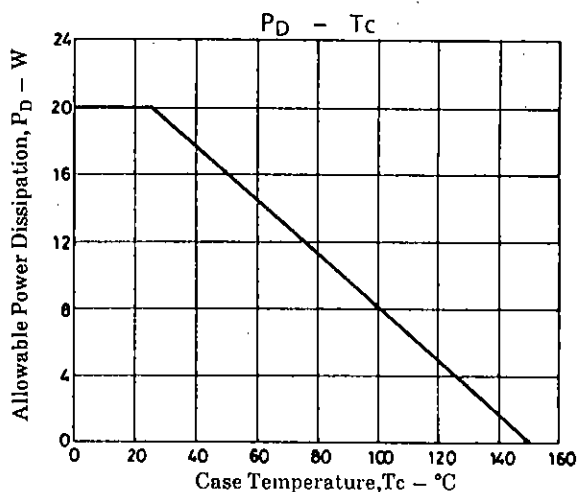
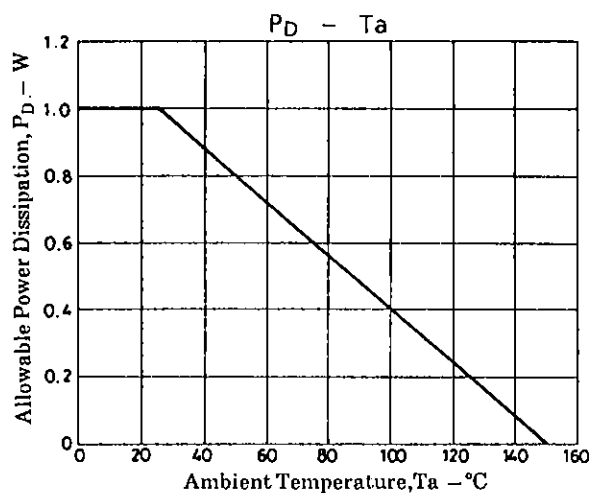
(unit: mm)



- 1: Gate
- 2: Drain
- 3: Source
- 4: Drain

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