

<b>SANYO</b>	No.4557	<b>2SK2199</b>
		N-Channel MOS Silicon FET Very High-Speed Switching Applications

**Features**

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

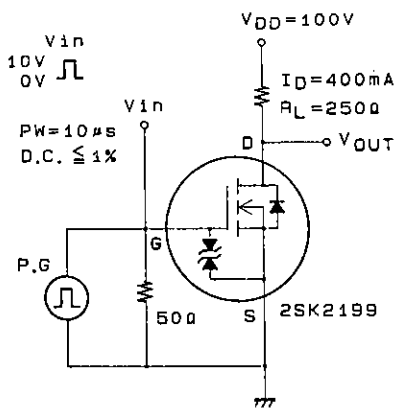
**Absolute Maximum Ratings at Ta = 25°C**

			unit
Drain-to-Source Voltage	V <sub>DSS</sub>	250	V
Gate-to-Source Voltage	V <sub>GSS</sub>	±20	V
Drain Current(DC)	I <sub>D</sub>	800	mA
Drain Current(Pulse)	I <sub>DP</sub>	PW ≤ 10μs, duty cycle ≤ 1%	3.2 A
Allowable Power Dissipation	P <sub>D</sub>	1	W
		Tc = 25°C	15 W
Channel Temperature	Tch	150	°C
Storage Temperature	Tstg	-55 to +150	°C

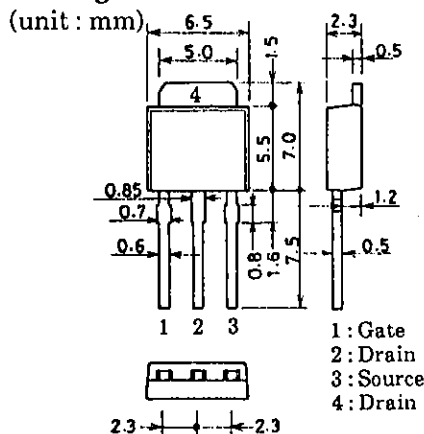
**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = 1mA, V <sub>GS</sub> = 0	250			V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = 250V, V <sub>GS</sub> = 0			100	μA
Gate-to-Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> = ±18V, V <sub>DS</sub> = 0			±10	μA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> = 10V, I <sub>D</sub> = 1mA	1.5		2.5	V
Forward Transfer Admittance	Y <sub>fs</sub>	V <sub>DS</sub> = 10V, I <sub>D</sub> = 400mA	0.6	0.9		S
Static Drain-to-Source ON State Resistance	R <sub>DS(on)</sub>	I <sub>D</sub> = 400mA, V <sub>GS</sub> = 10V		3.5	5	Ω
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = 20V, f = 1MHz		80		pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = 20V, f = 1MHz		20		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = 20V, f = 1MHz		8		pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See specified Test Circuit.		10		ns
Rise Time	t <sub>r</sub>	∕		10		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	∕		65		ns
Fall Time	t <sub>f</sub>	∕		30		ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = 800mA, V <sub>GS</sub> = 0		1.0		V

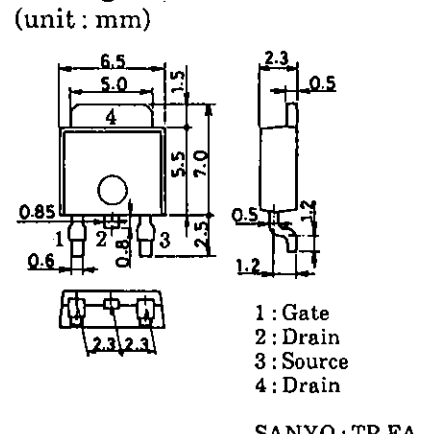
**Switching Time Test Circuit**

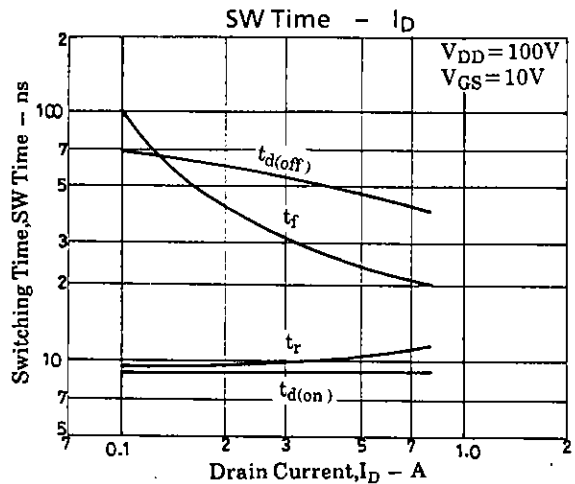
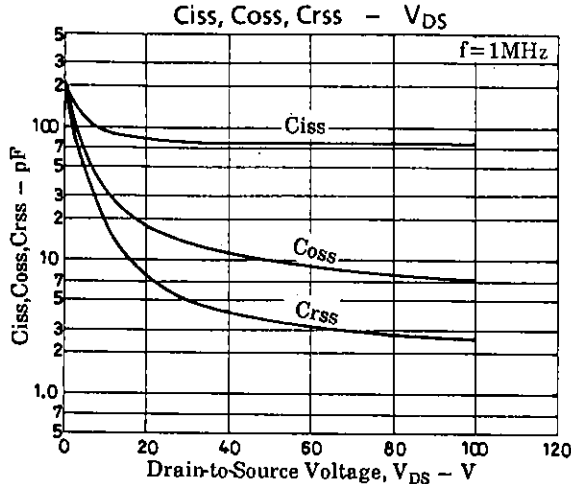
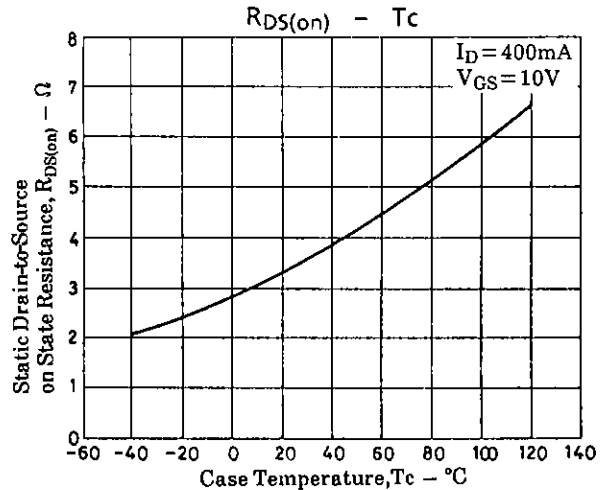
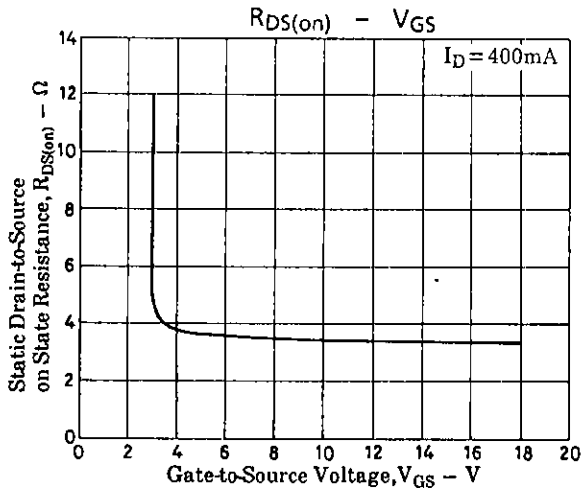
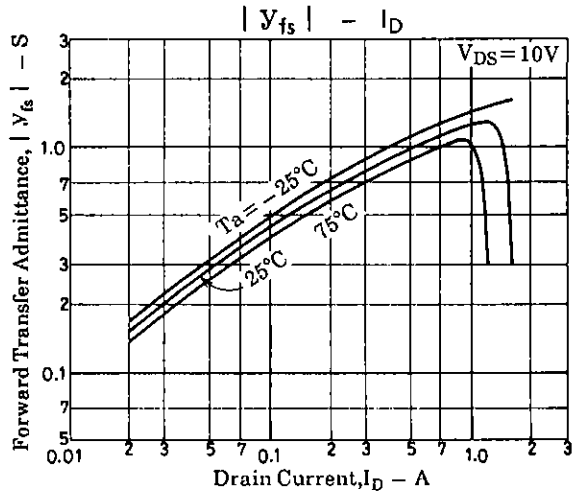
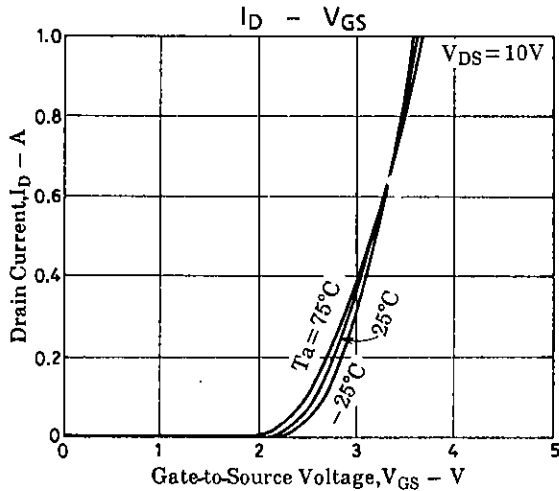
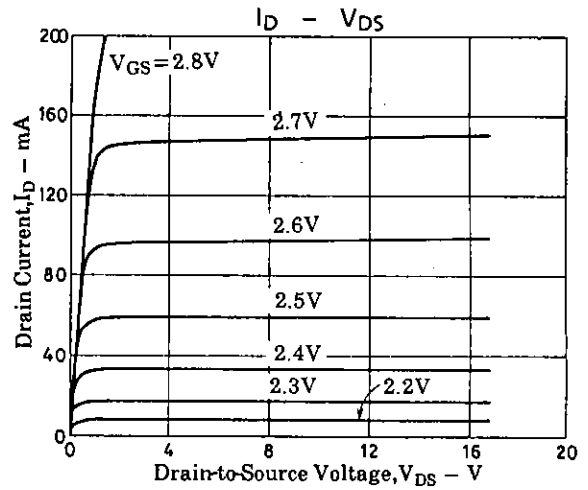
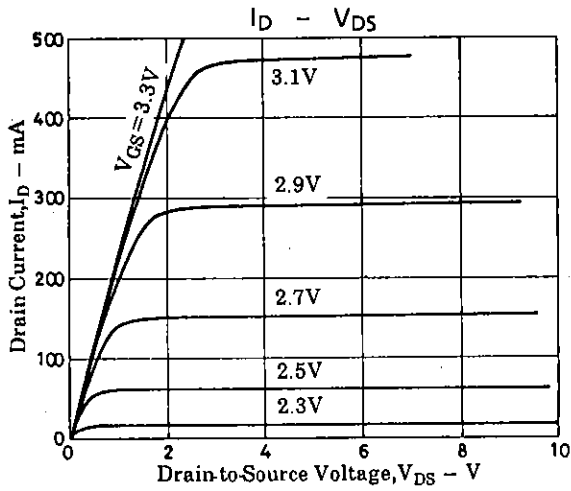


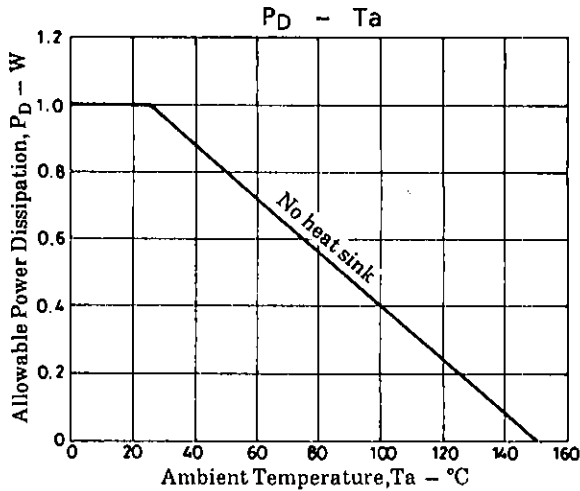
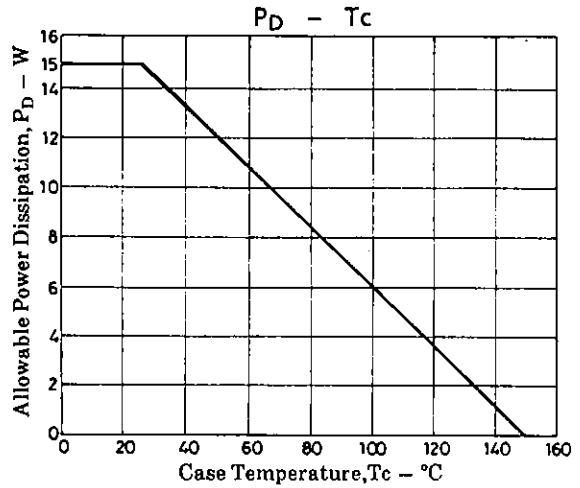
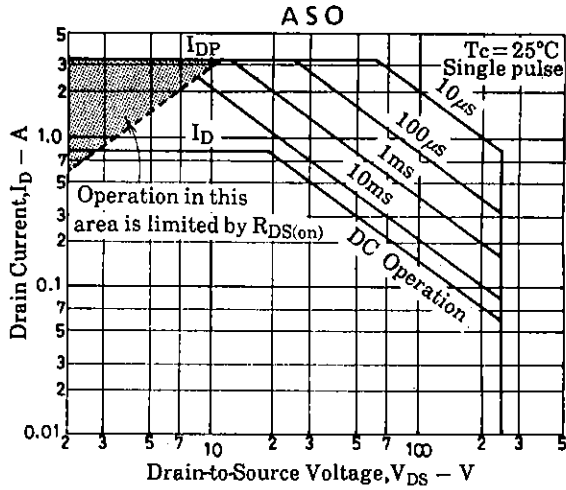
**Package Dimensions 2083B**



**Package Dimensions 2092B**







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