

<b>SANYO</b>	No.4311	<b>2SK1922</b>
		N-Channel MOS Silicon FET Very High-Speed Switching Applications

**Features**

- Low ON resistance.
- Very high-speed switching.
- High-speed diode (trr = 100ns).

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

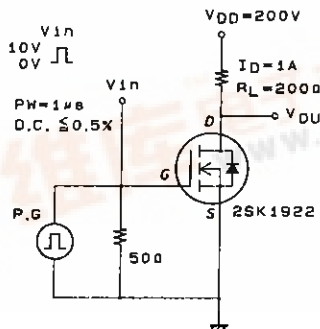
			unit
Drain-to-Source Voltage	V <sub>DSS</sub>	600	V
Gate-to-Source Voltage	V <sub>GSS</sub>	±30	V
Drain Current(DC)	I <sub>D</sub>	2	A
Drain Current(Pulse)	I <sub>DP</sub>	8	A
Allowable Power Dissipation	P <sub>D</sub>	1.75	W
		50	W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

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

			min	typ	max	unit
D-S Breakdown Voltage	V <sub>DSS</sub>	I <sub>D</sub> = 10mA, V <sub>GS</sub> = 0	600			V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = 480V, V <sub>GS</sub> = 0			1.0	mA
Gate-to-Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> = ±30V, V <sub>DS</sub> = 0			±100	nA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> = 10V, I <sub>D</sub> = 1mA	2.0		3.0	V
Forward Transfer Admittance	Y <sub>fs</sub>	V <sub>DS</sub> = 10V, I <sub>D</sub> = 1A	0.8	1.5		S
Static Drain-to-Source on State Resistance	R <sub>DS(on)</sub>	I <sub>D</sub> = 1A, V <sub>GS</sub> = 10V		3.2	4.3	Ω
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = 20V, f = 1MHz		400		pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = 20V, f = 1MHz		55		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = 20V, f = 1MHz		15		pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See specified Test Circuit.		10		ns
Rise Time	t <sub>r</sub>	"		12		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	"		65		ns
Fall Time	t <sub>f</sub>	"		40		ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = 2A, V <sub>GS</sub> = 0			1.5	V
Diode Reverse Recovery Time	trr	I <sub>S</sub> = 2A, di/dt = 100A/μs		100		ns

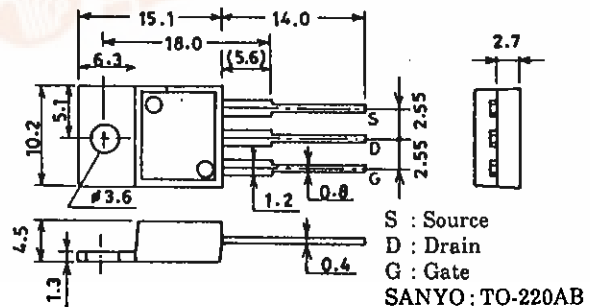
(Note) Be careful in handling the 2SK1922 because it has no protection diode between gate and source.

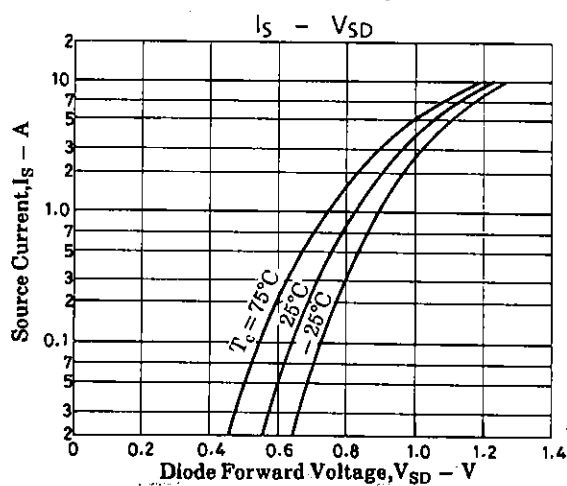
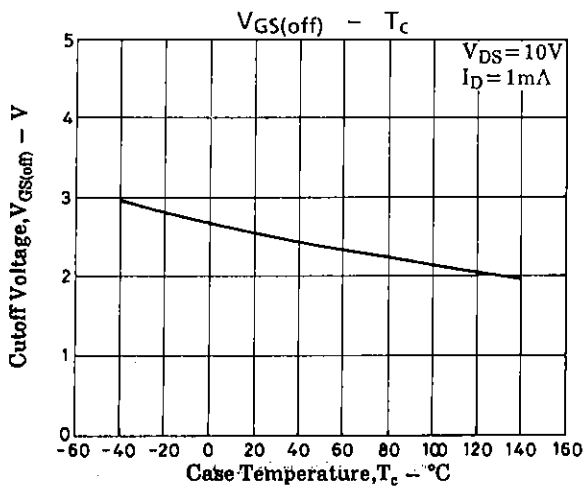
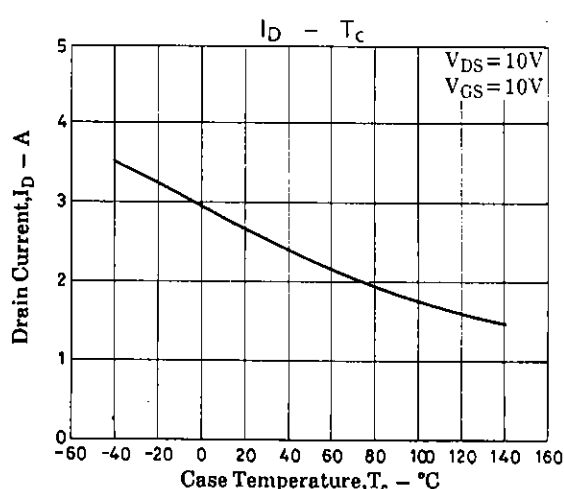
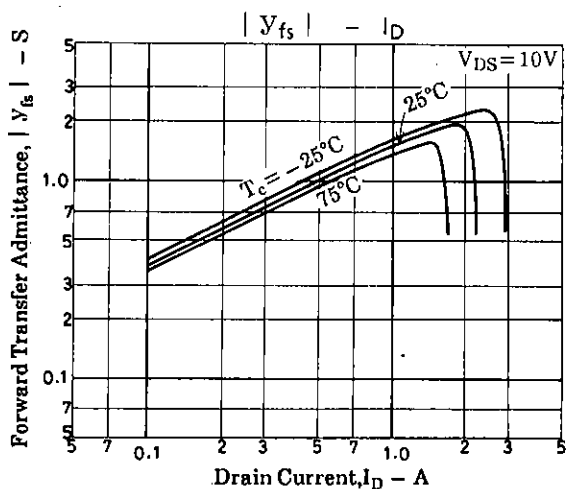
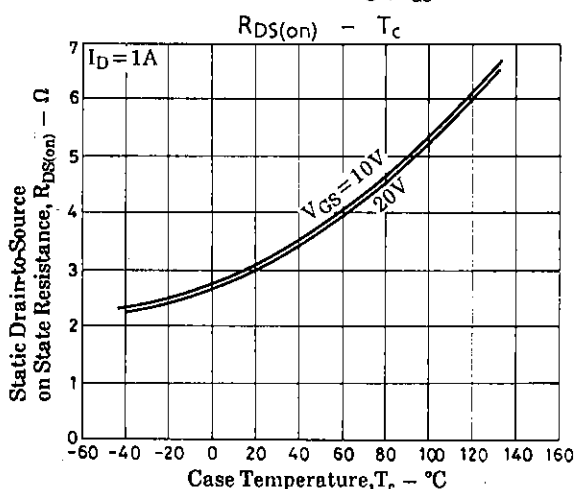
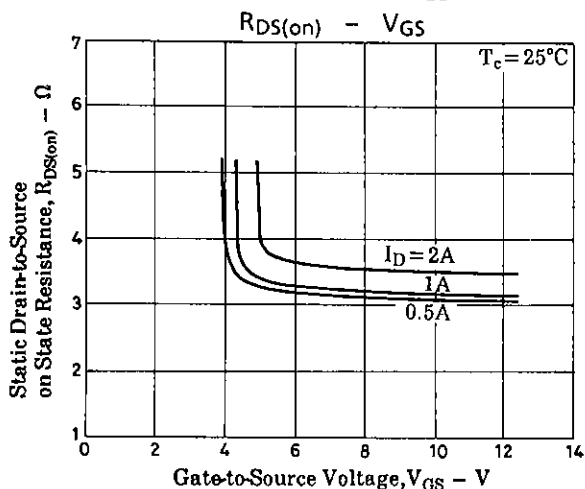
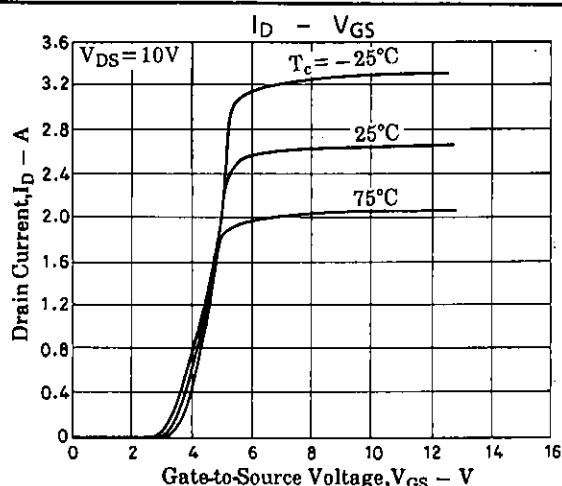
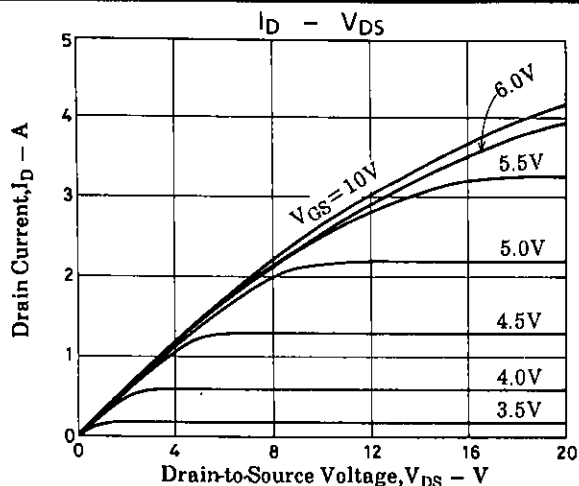
**Switching Time Test Circuit**

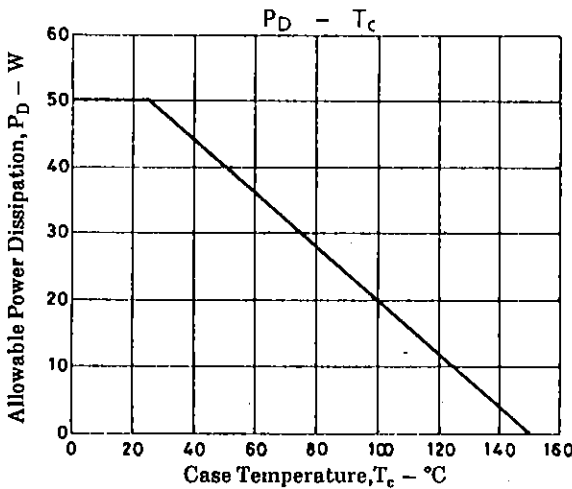
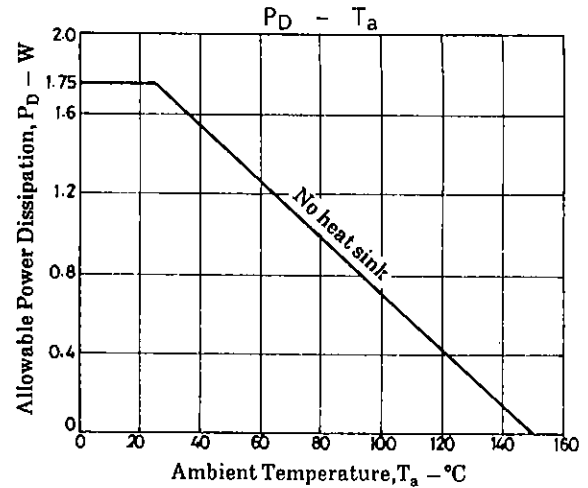
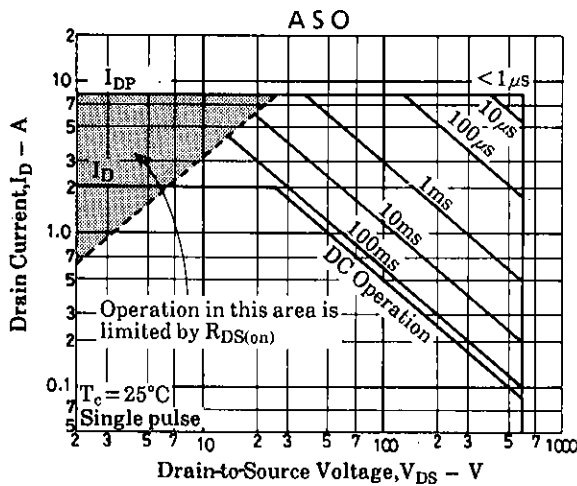
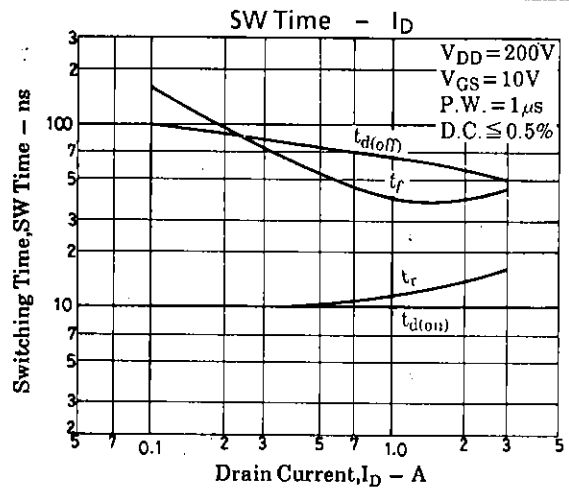
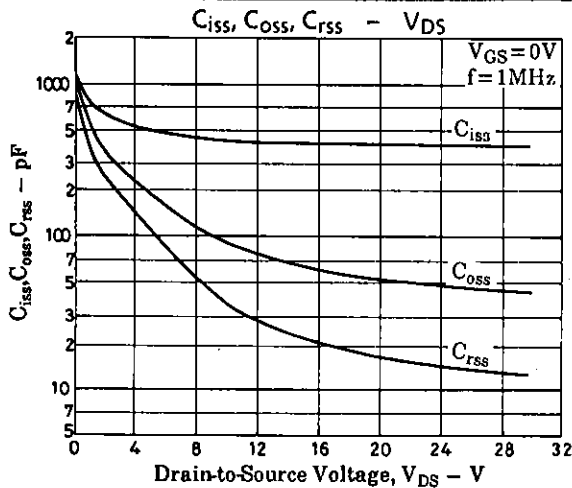


**Package Dimensions 2052B**

(unit : mm)







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