

SANYO	No.4311	2SK1922
		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

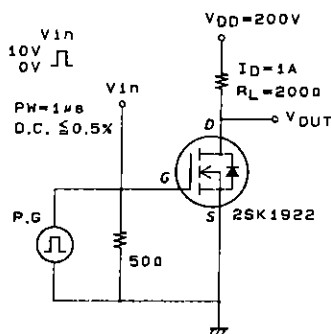
			unit
Drain-to-Source Voltage	V _{DS}	600	V
Gate-to-Source Voltage	V _{GSS}	±30	V
Drain Current(DC)	I _D	2	A
Drain Current(Pulse)	I _{DP}	8	A
Allowable Power Dissipation	P _D	1.75	W
		50	W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

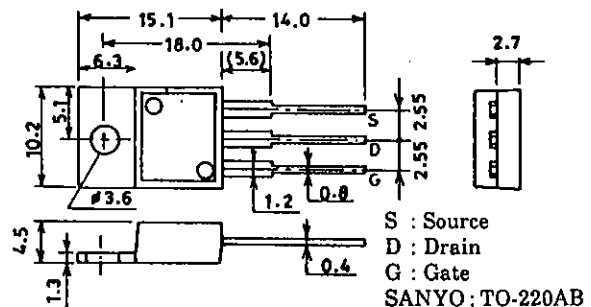
			min	typ	max	unit
D-S Breakdown Voltage	V _{DS}	I _D = 10mA, V _{GS} = 0	600			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = 480V, V _{GS} = 0			1.0	mA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±30V, V _{DS} = 0			±100	nA
Cutoff Voltage	V _{GSS(off)}	V _{DS} = 10V, I _D = 1mA	2.0		3.0	V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

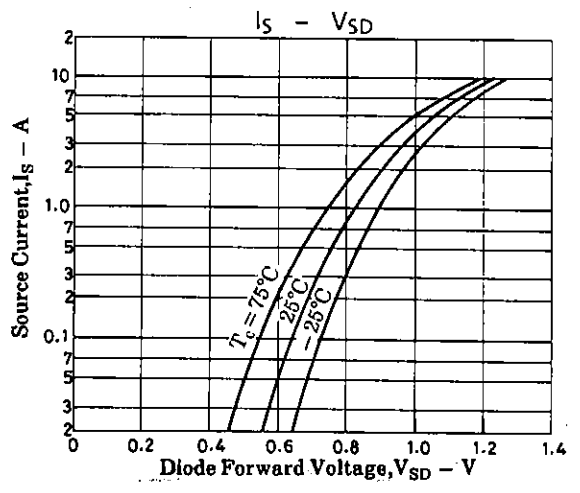
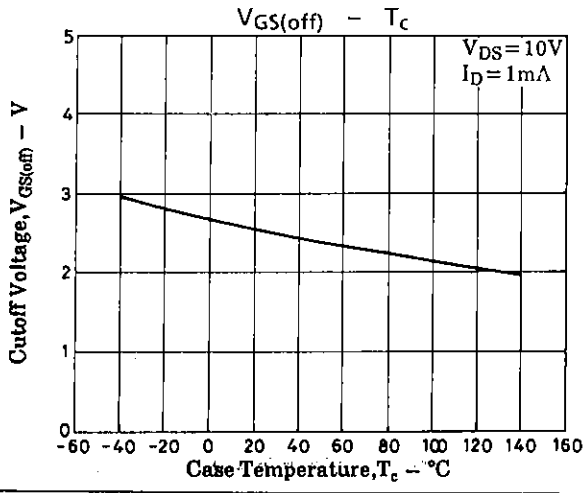
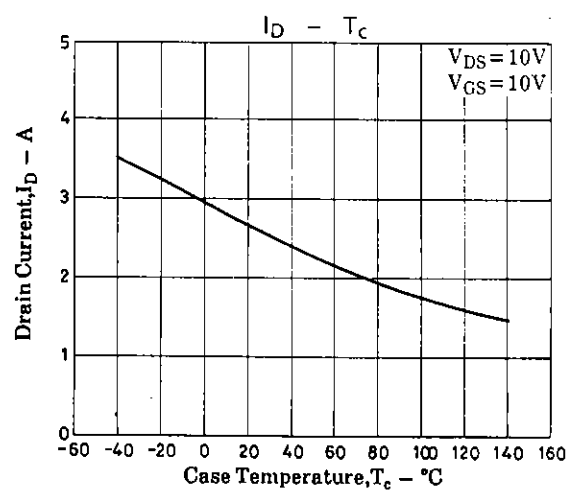
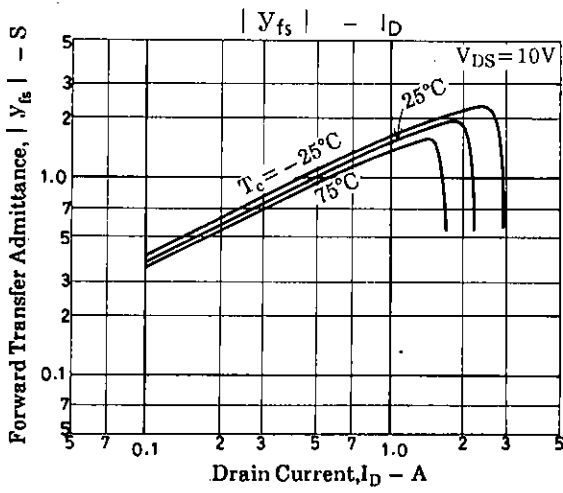
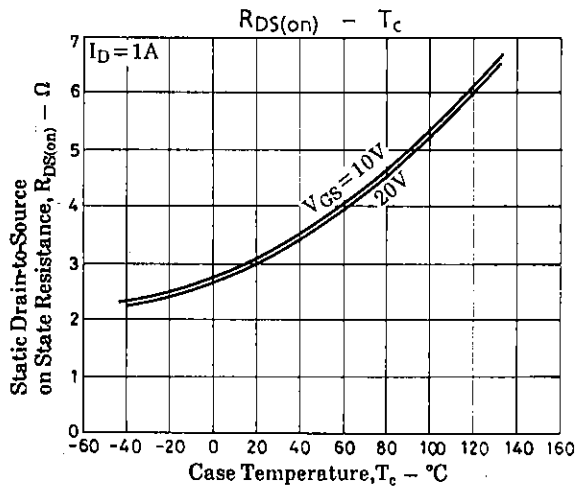
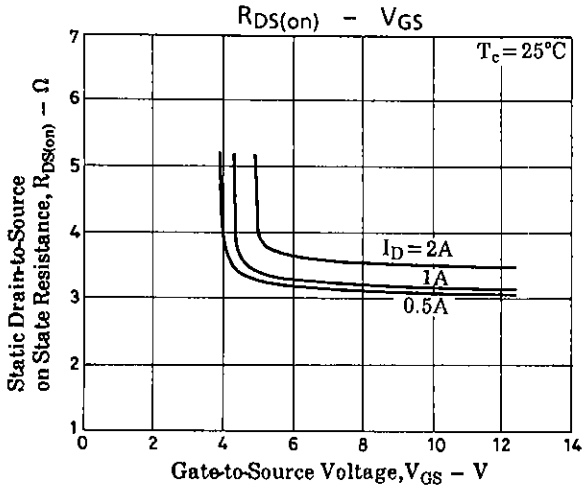
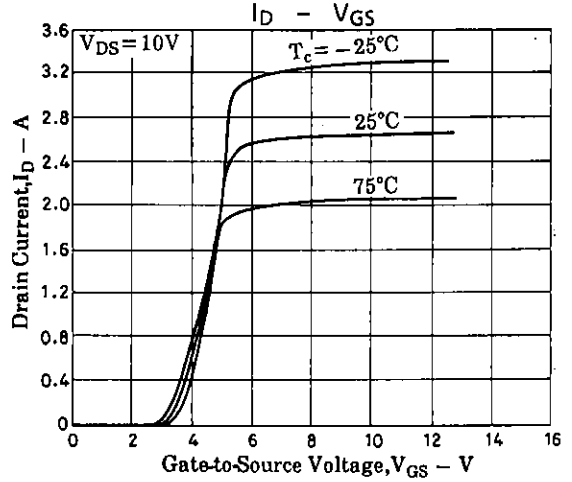
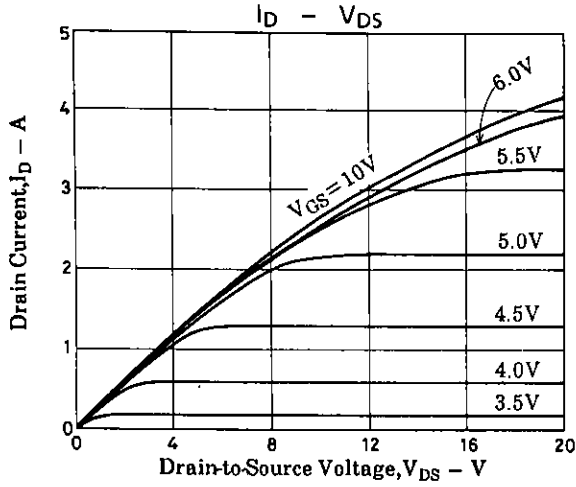
(Note) Be careful in handling the 2SK1922 because it has no protection diode between gate and source.

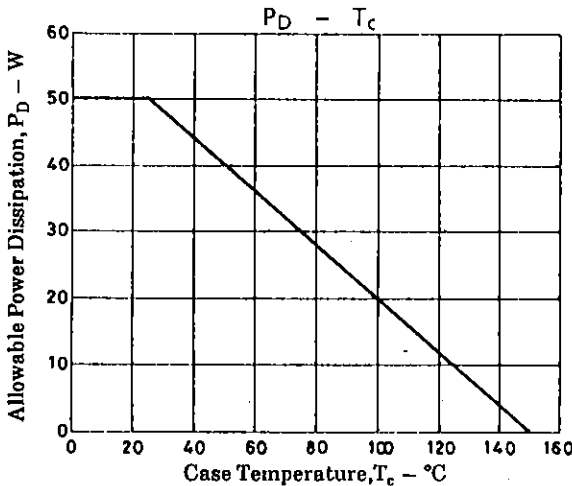
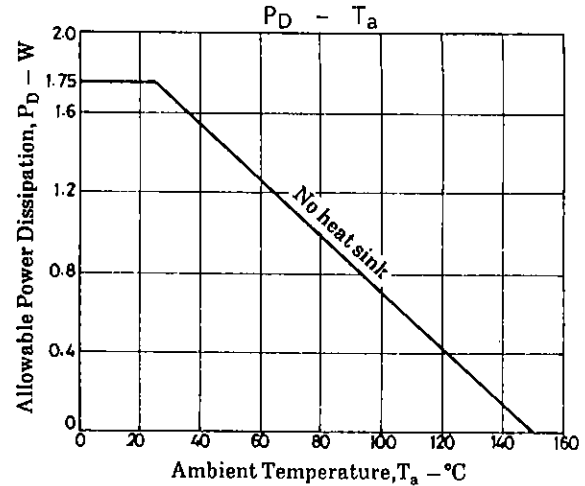
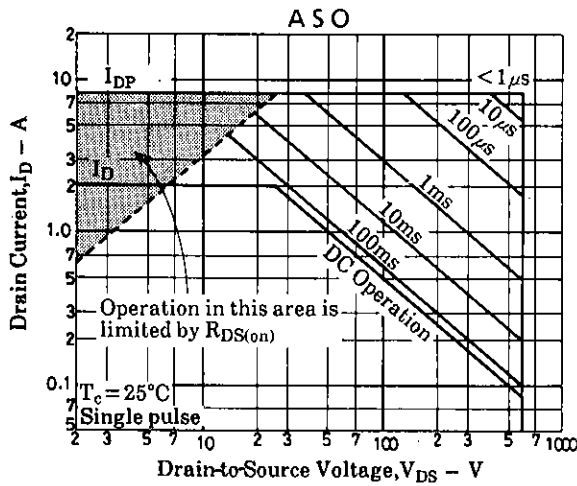
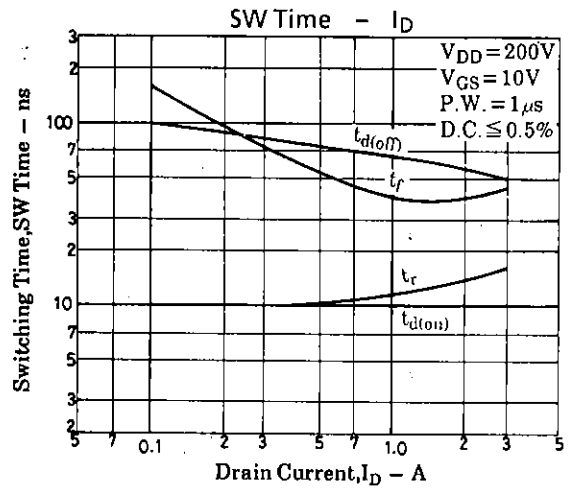
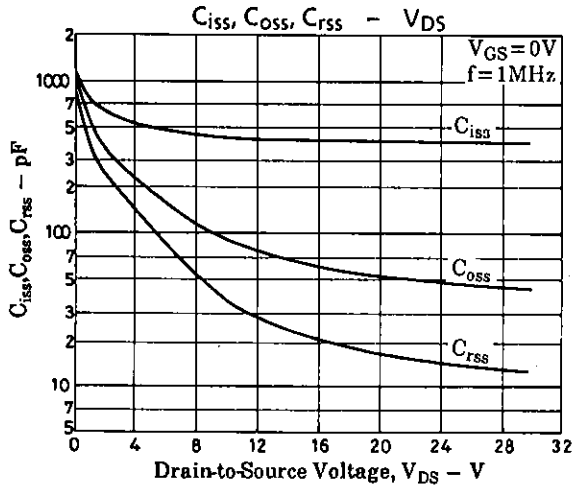
Switching Time Test Circuit



Package Dimensions 2052B (unit: mm)







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