

SANYO	No.4320	2SK2011
		N-Channel MOS Silicon FET Very High-Speed Switching Applications

Features

- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.
- Micaless package facilitating mounting.

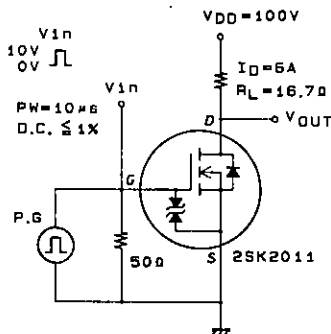
Absolute Maximum Ratings at Ta = 25°C

Drain-to-Source Voltage	V_{DSS}	250	V	unit
Gate-to-Source Voltage	V_{GSS}	±30	V	
Drain Current(DC)	I_D	12	A	
Drain Current(Pulse)	I_{DP}	48	A	
Allowable Power Dissipation	P_D	2.0	W	
		$T_c = 25^\circ C$	30	W
Channel Temperature	T_{ch}	150	°C	
Storage Temperature	T_{stg}	-55 to +150	°C	

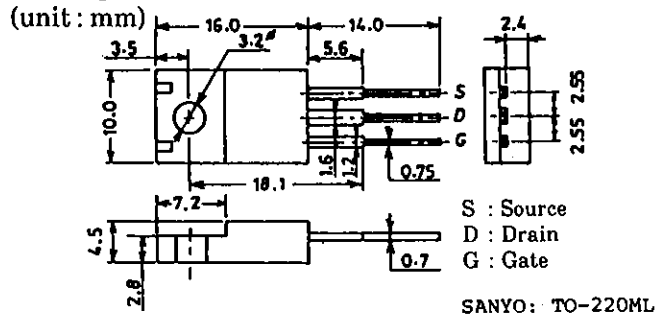
Electrical Characteristics at Ta = 25°C

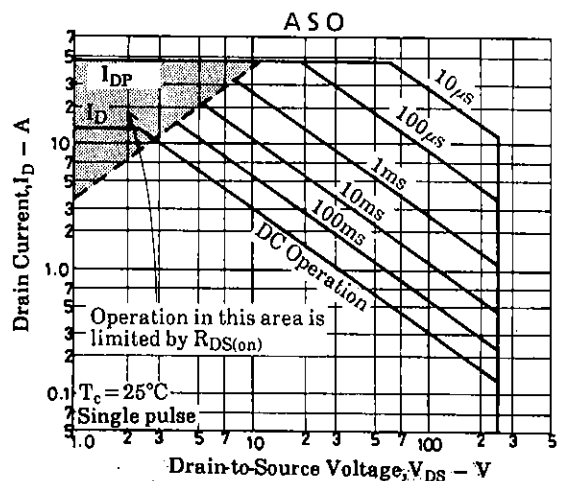
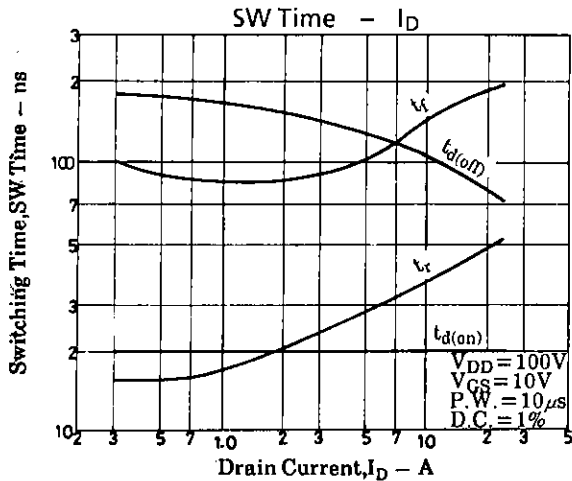
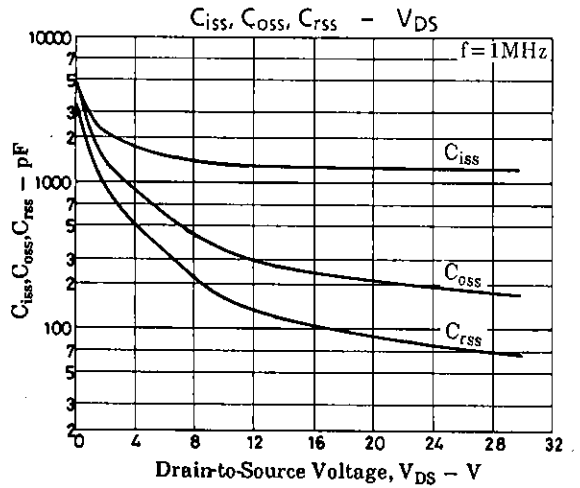
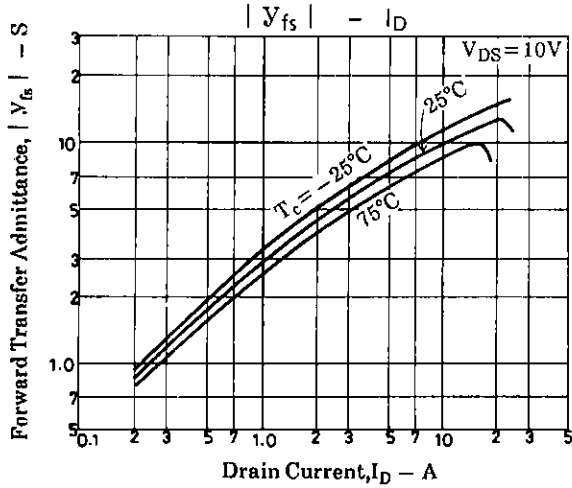
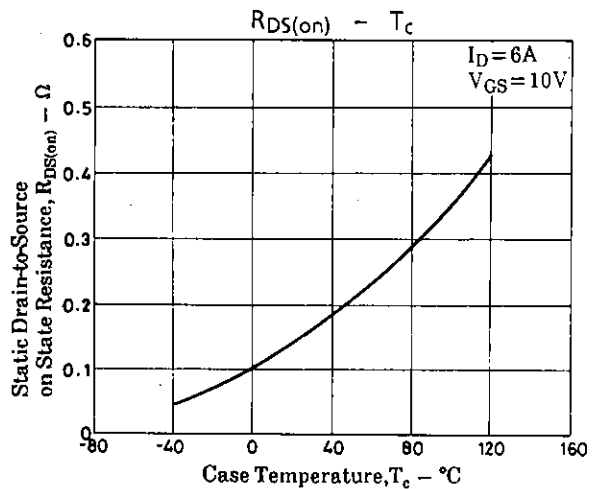
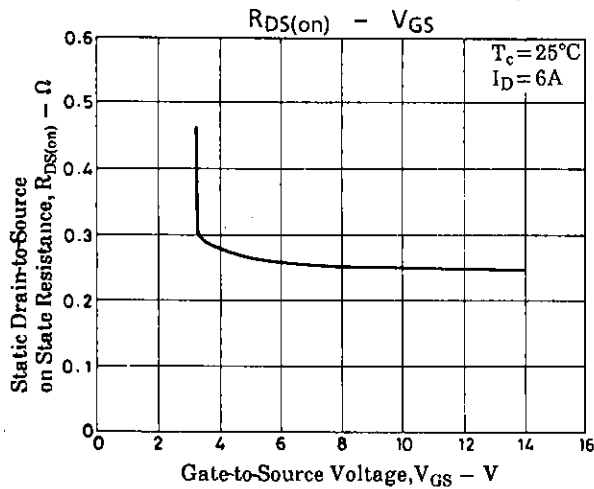
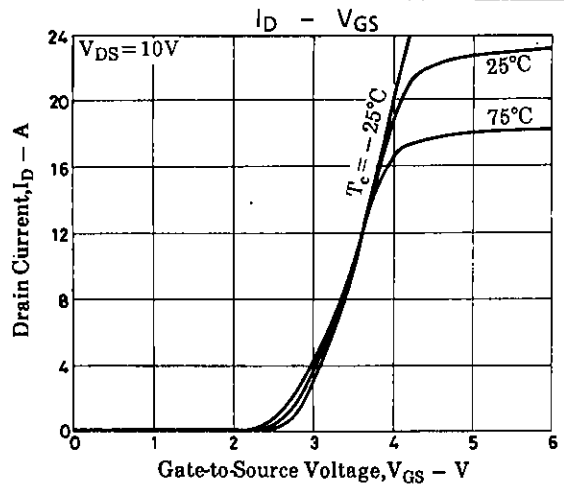
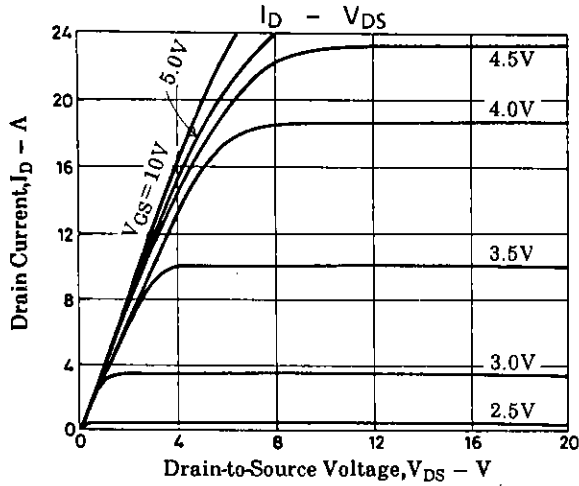
			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1mA, V_{GS} = 0$	250			V
G-S Breakdown Voltage	$V_{(BR)GSS}$	$I_G = \pm 100\mu A, V_{DS} = 0$	±30			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 250V, V_{GS} = 0$			100	μA
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = \pm 25V, V_{DS} = 0$			±10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1mA$	1.5		2.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 10V, I_D = 6A$	5	8		S
Static Drain-to-Source on State Resistance	$R_{DS(on)}$	$I_D = 6A, V_{GS} = 10V$		0.25	0.35	Ω
Input Capacitance	C_{iss}	$V_{DS} = 20V, f = 1MHz$		1250		pF
Output Capacitance	C_{oss}	$V_{DS} = 20V, f = 1MHz$		215		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = 20V, f = 1MHz$		85		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		20		ns
Rise Time	t_r	"/		30		ns
Turn-OFF Delay Time	$t_{d(off)}$	"/		125		ns
Fall Time	t_f	"/		110		ns
Diode Forward Voltage	V_{SD}	$I_S = 12A, V_{GS} = 0$		1.0	1.5	V

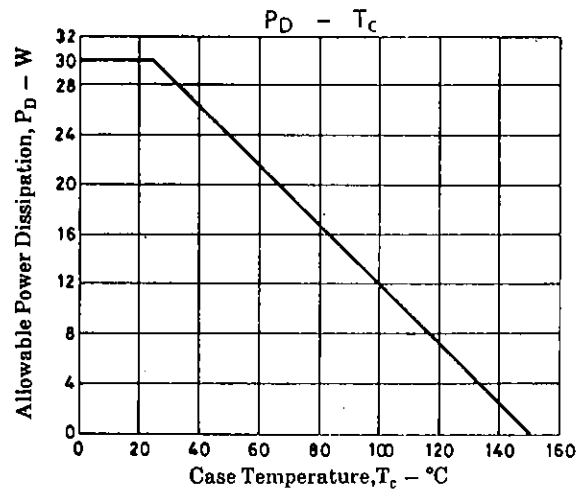
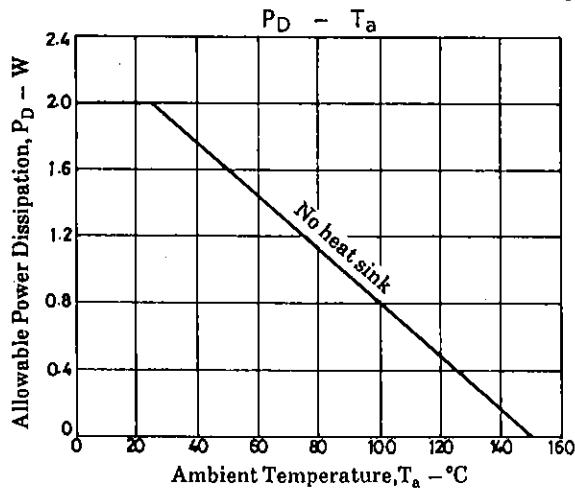
Switching Time Test Circuit



Package Dimensions 2063







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