

SANYO

No.4601A

2SK2161

N-Channel MOS Silicon FET

Very High-Speed
Switching Applications**Features**

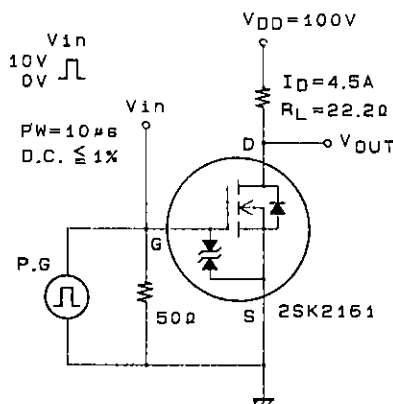
- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.
- Micaless package facilitating mounting.

Absolute Maximum Ratings at Ta = 25°C

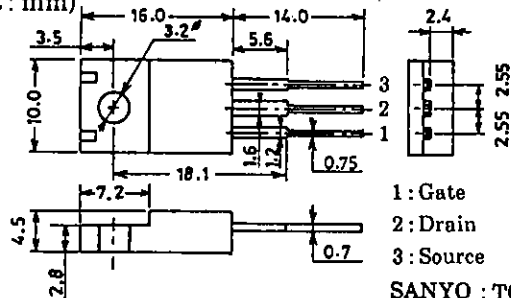
			unit	
Drain-to-Source Voltage	V_{DS}	200	V	
Gate-to-Source Voltage	V_{GS}	± 20	V	
Drain Current(DC)	I_D	9	A	
Drain Current(Pulse)	I_{DP}	$PW \leq 10\mu s, \text{duty cycle} \leq 1\%$	36	A
Allowable Power Dissipation	P_D		2.0	W
		$T_c = 25^\circ C$	25	W
Channel Temperature	T_{ch}		150	$^\circ C$
Storage Temperature	T_{stg}		-55 to +150	$^\circ C$

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1mA, V_{GS} = 0$	200			V
G-S Breakdown Voltage	$V_{(BR)GSS}$	$I_G = \pm 100\mu A, V_{DS} = 0$	± 20			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 200V, V_{GS} = 0$			100	μA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = \pm 16V, V_{DS} = 0$			± 10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1mA$	1.5		2.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 10V, I_D = 4.5A$	3.5	6		S
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}$	$I_D = 4.5A, V_{GS} = 10V$		250	350	m Ω
Input Capacitance	C_{iss}	$V_{DS} = 20V, f = 1MHz$		700		pF
Output Capacitance	C_{oss}	$V_{DS} = 20V, f = 1MHz$		140		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = 20V, f = 1MHz$		55		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		14		ns
Rise Time	t_r	"		19		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		200		ns
Fall Time	t_f	"		80		ns
Diode Forward Voltage	V_{SD}	$I_S = 9A, V_{GS} = 0$		1.0	1.5	V

Switching Time Test Circuit**Package Dimensions 2063A**

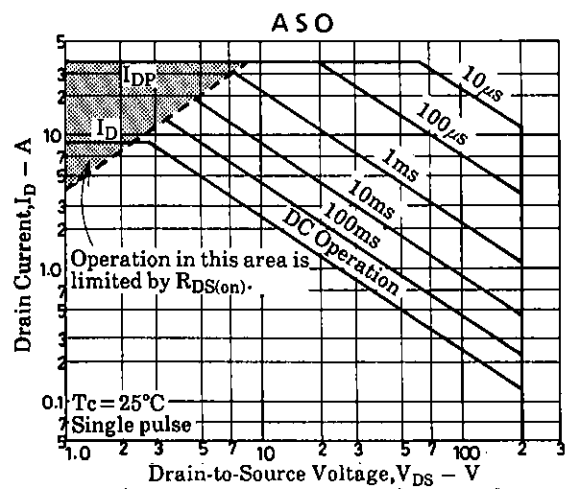
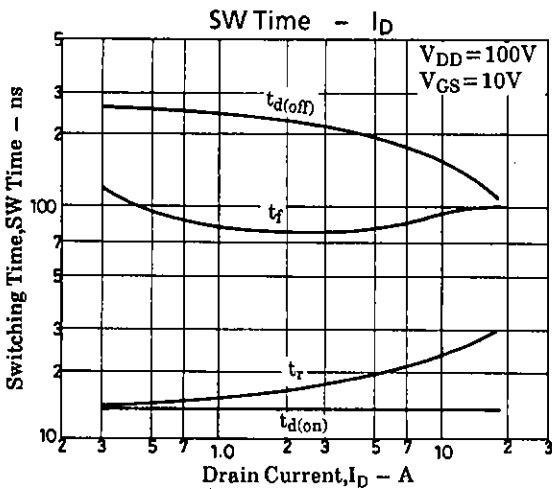
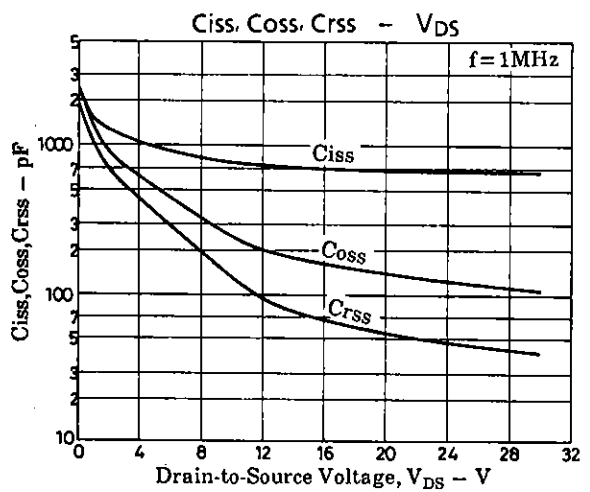
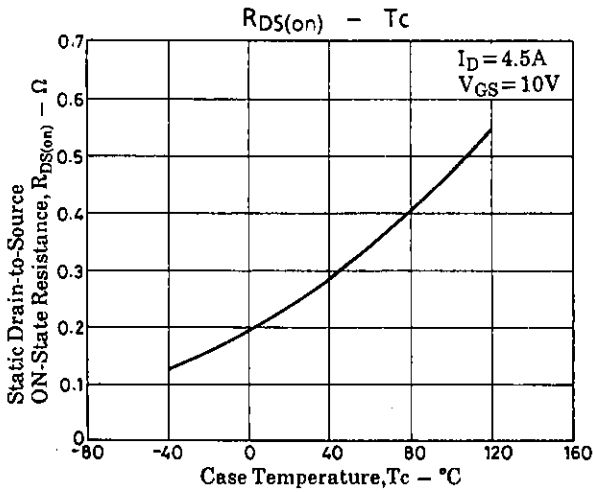
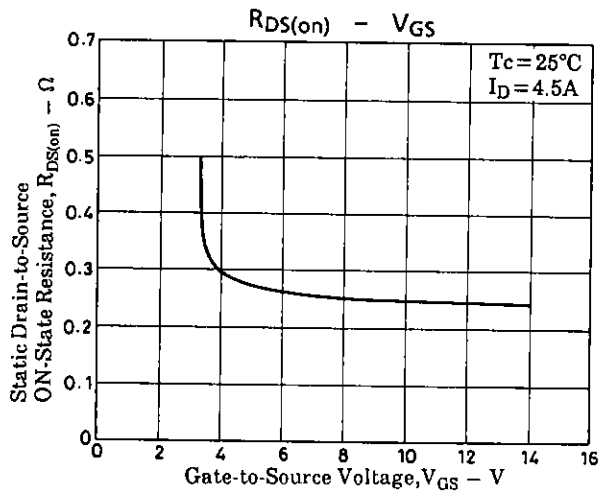
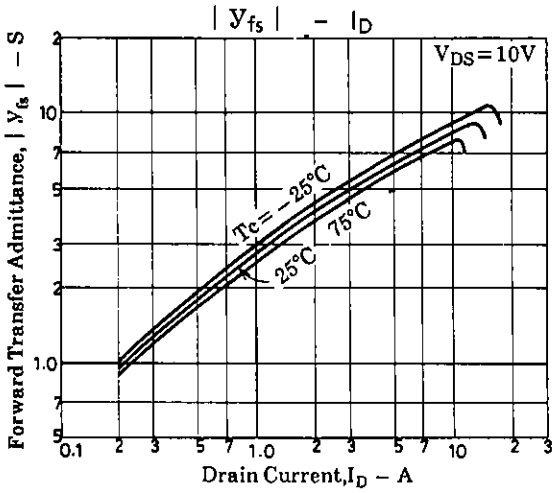
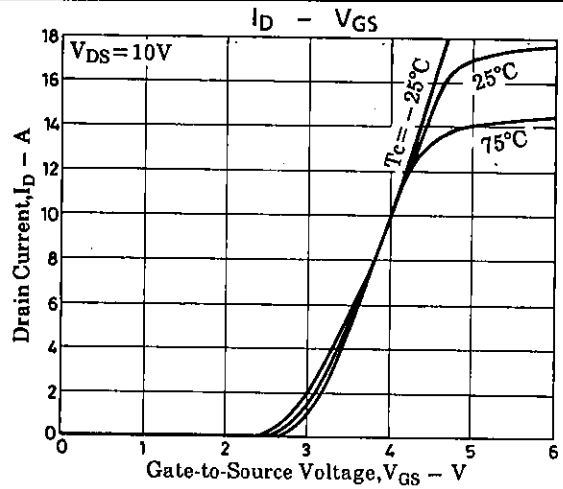
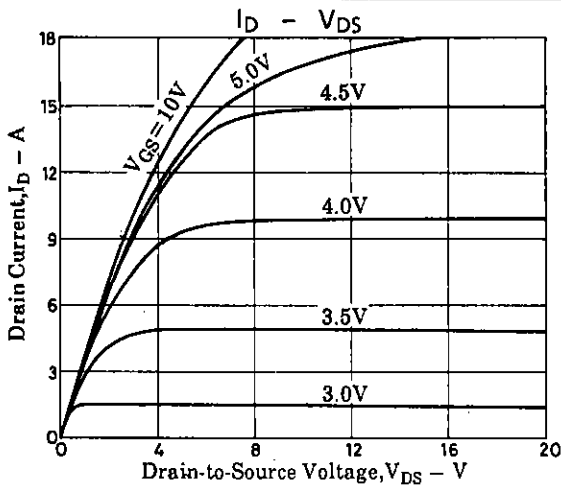
(unit: mm)

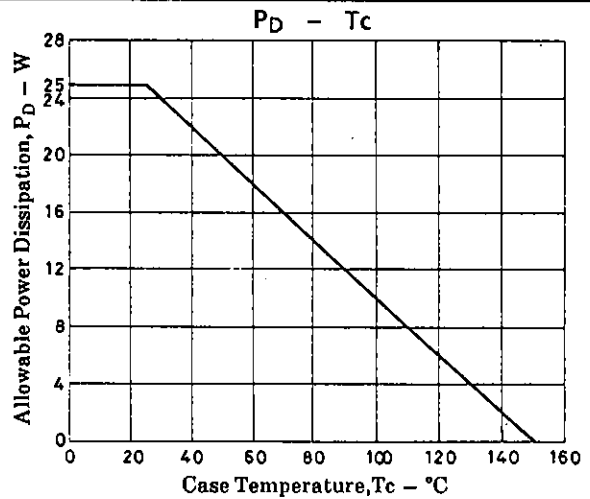
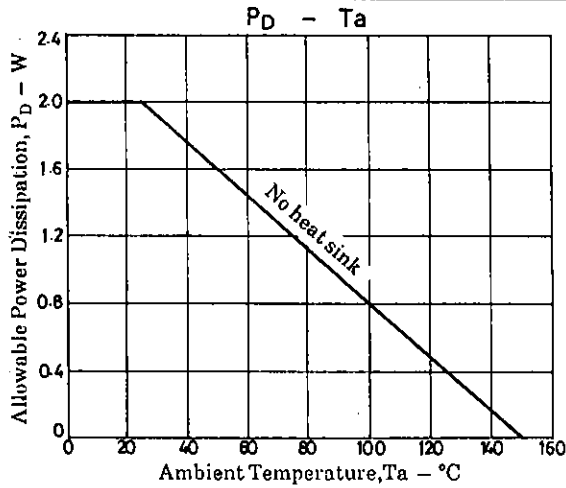


1: Gate
2: Drain
3: Source

SANYO : TO-220ML

SANYO Electric Co., Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN





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