

SANYO	No.4649	2SK1905
		N-Channel MOS Silicon FET Very High-Speed Switching Applications

Features

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

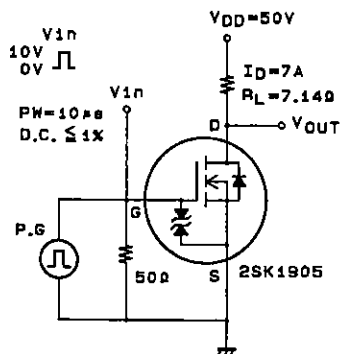
Absolute Maximum Ratings at Ta = 25°C

			unit
Drain-to-Source Voltage	V_{DS}	100	V
Gate-to-Source Voltage	V_{GS}	± 20	V
Drain Current(DC)	I_D	12	A
Drain Current(Pulse)	I_{DP}	$PW \leq 10\mu s, \text{ duty cycle} \leq 1\%$	A
Allowable Power Dissipation	P_D	2.0	W
		$T_c = 25^\circ C$	W
Channel Temperature	T_{ch}	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

Electrical Characteristics at Ta = 25°C

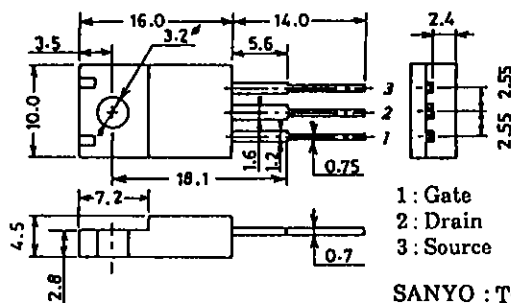
			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1mA, V_{GS} = 0$	100			V
G-S Breakdown Voltage	$V_{(BR)GSS}$	$I_G = \pm 100\mu A, V_{DS} = 0$	± 20			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 100V, V_{GS} = 0$			100	μA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = \pm 16V, V_{DS} = 0$			± 10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1mA$	1.0		2.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 10V, I_D = 7A$	7	11.5		S
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}$	$I_D = 7A, V_{GS} = 10V$		100	135	$m\Omega$
	$R_{DS(on)}$	$I_D = 7A, V_{GS} = 4V$		135	180	$m\Omega$
Input Capacitance	C_{iss}	$V_{DS} = 20V, f = 1MHz$		1230		pF
Output Capacitance	C_{oss}	$V_{DS} = 20V, f = 1MHz$		200		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = 20V, f = 1MHz$		40		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		14		ns
Rise Time	t_r	"		21		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		230		ns
Fall Time	t_f	"		90		ns
Diode Forward Voltage	V_{SD}	$I_S = 12A, V_{GS} = 0$	1.0	1.5		V

Switching Time Test Circuit

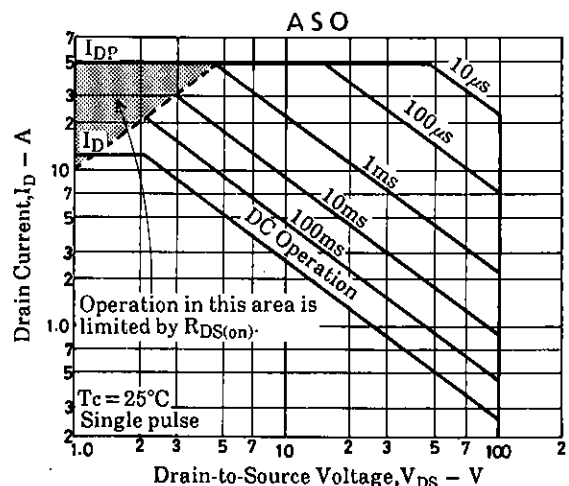
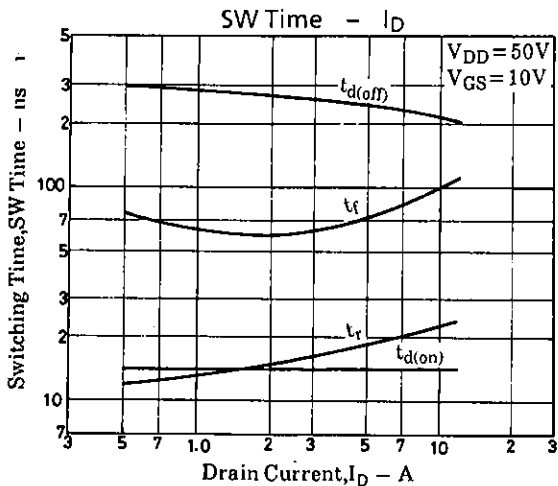
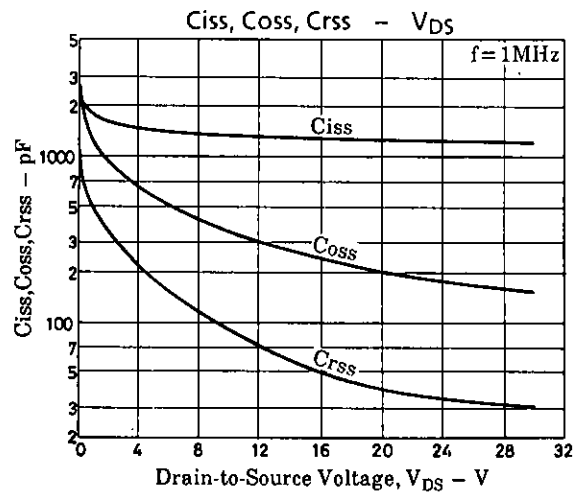
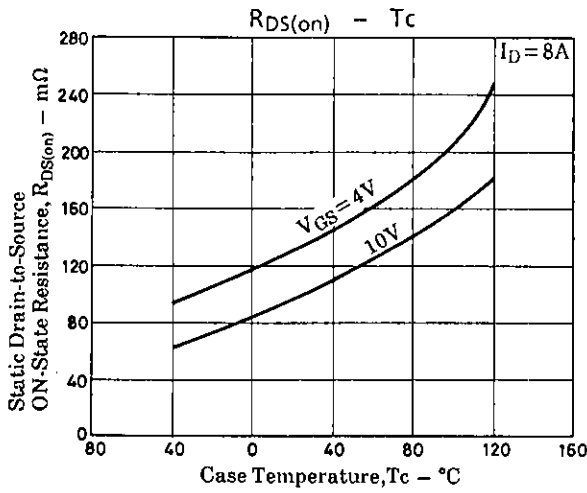
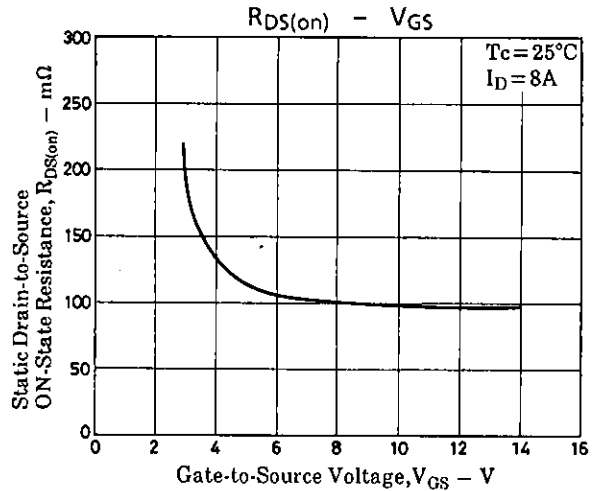
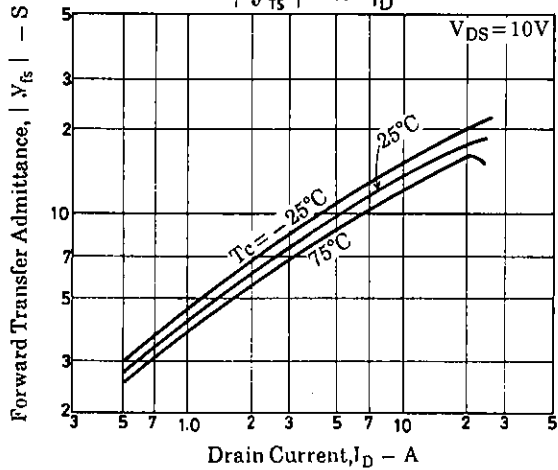
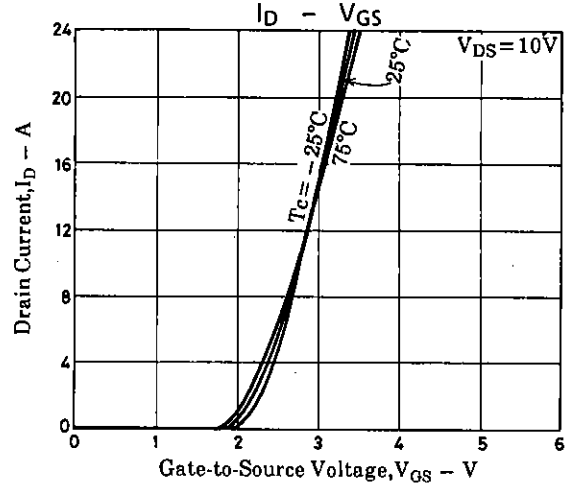
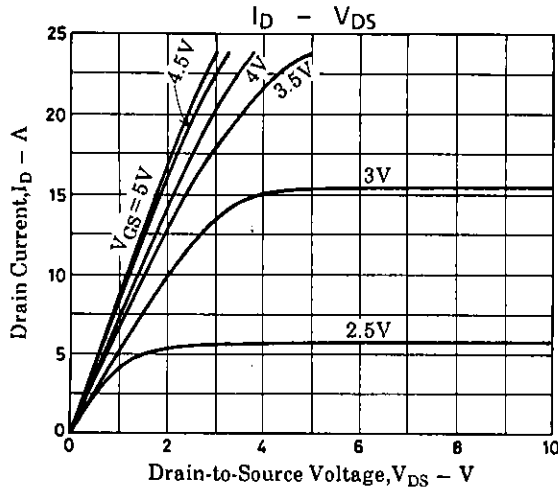


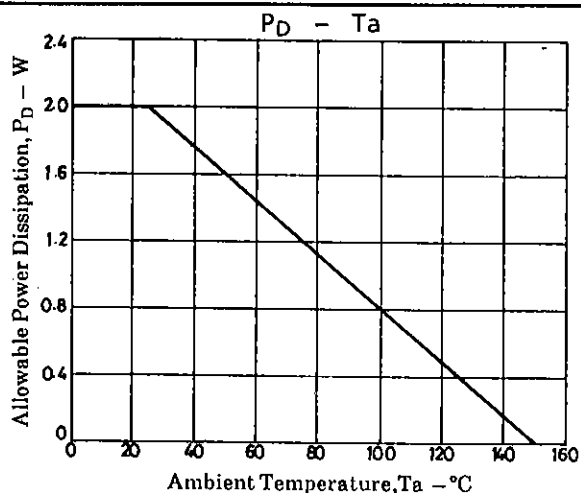
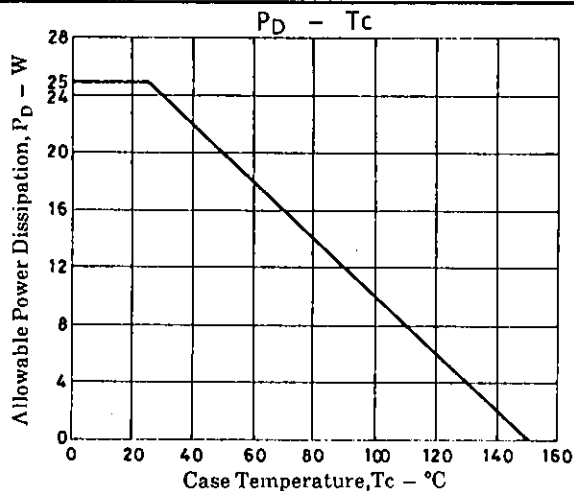
Package Dimensions 2063A

(unit: mm)



SANYO : TO-220ML





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