

<b>SANYO</b>	No.4649	<b>2SK1905</b>
		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.

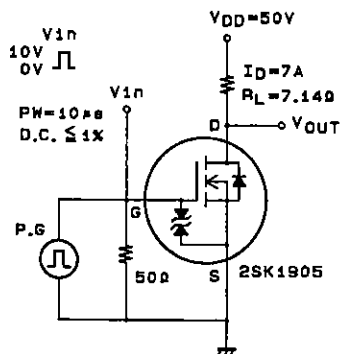
**Absolute Maximum Ratings at Ta = 25°C**

			unit
Drain-to-Source Voltage	V <sub>DSS</sub>	100	V
Gate-to-Source Voltage	V <sub>GSS</sub>	±20	V
Drain Current(DC)	I <sub>D</sub>	12	A
Drain Current(Pulse)	I <sub>DP</sub>	48	A
Allowable Power Dissipation	P <sub>D</sub>	2.0	W
		T <sub>c</sub> = 25°C	
		25	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**

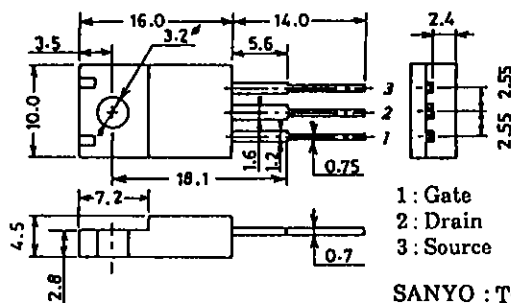
			min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = 1mA, V <sub>GS</sub> = 0	100			V
G-S Breakdown Voltage	V <sub>(BR)GSS</sub>	I <sub>G</sub> = ±100μA, V <sub>DS</sub> = 0	±20			V
Zero-Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = 100V, V <sub>GS</sub> = 0			100	μA
Gate-to-Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> = ±16V, V <sub>DS</sub> = 0			±10	μA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> = 10V, I <sub>D</sub> = 1mA	1.0		2.0	V
Forward Transfer Admittance	Y <sub>fs</sub>	V <sub>DS</sub> = 10V, I <sub>D</sub> = 7A	7	11.5		S
Static Drain-to-Source ON-State Resistance	R <sub>DS(on)</sub>	I <sub>D</sub> = 7A, V <sub>GS</sub> = 10V		100	135	mΩ
	R <sub>DS(on)</sub>	I <sub>D</sub> = 7A, V <sub>GS</sub> = 4V		135	180	mΩ
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = 20V, f = 1MHz		1230		pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = 20V, f = 1MHz		200		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = 20V, f = 1MHz		40		pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See specified Test Circuit.		14		ns
Rise Time	t <sub>r</sub>	∕		21		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	∕		230		ns
Fall Time	t <sub>f</sub>	∕		90		ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = 12A, V <sub>GS</sub> = 0	1.0	1.5		V

**Switching Time Test Circuit**

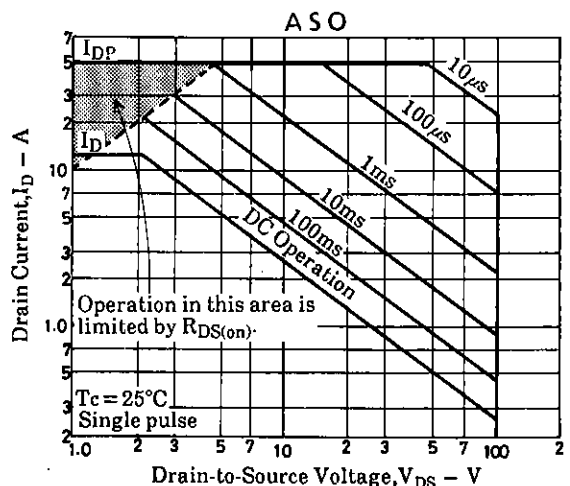
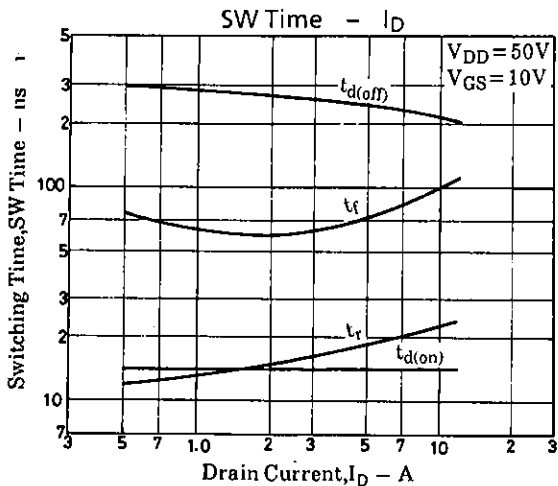
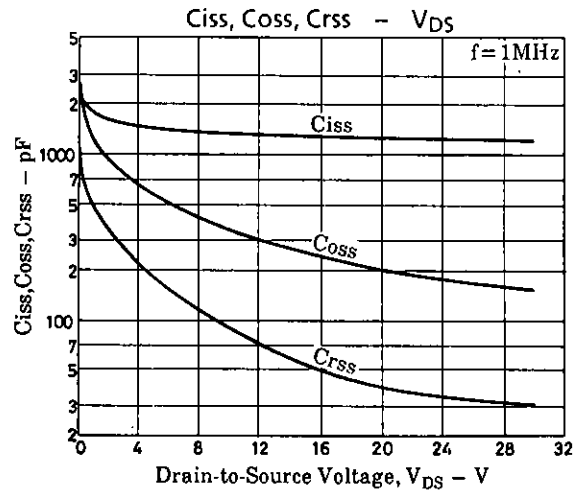
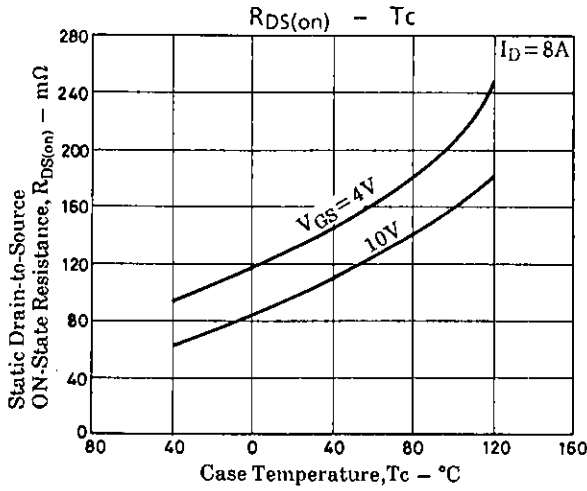
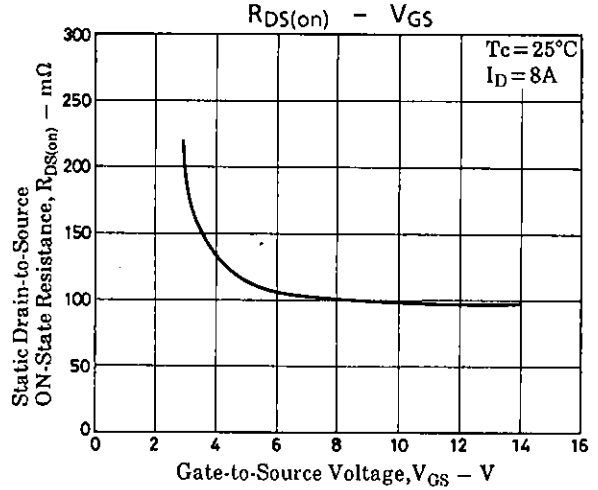
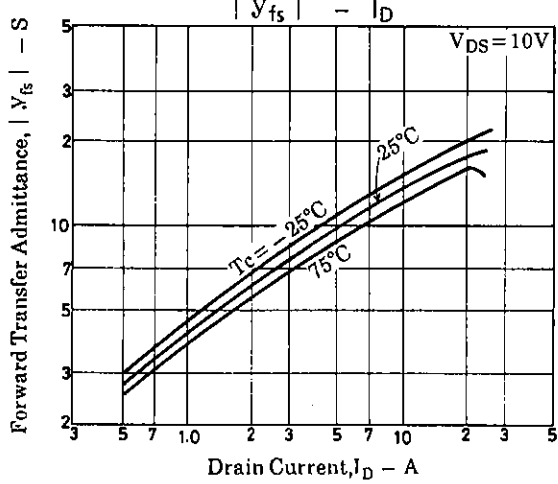
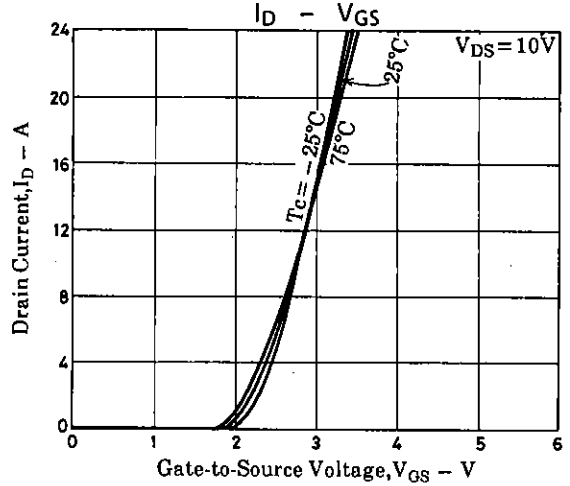
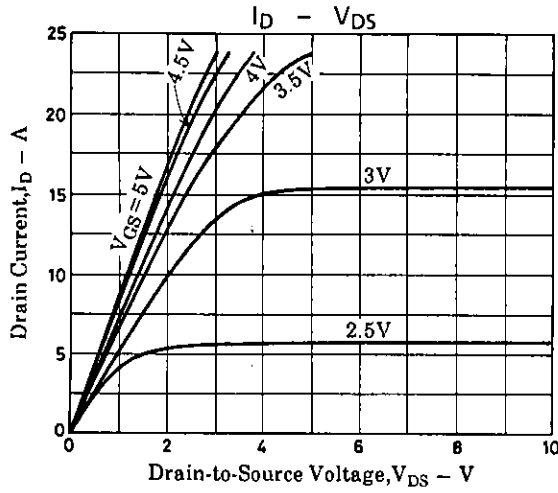


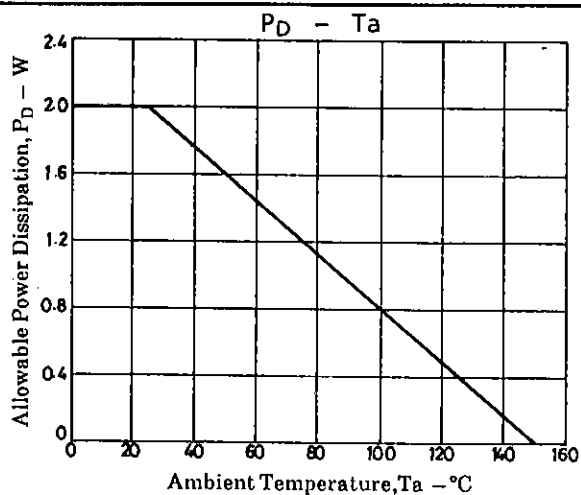
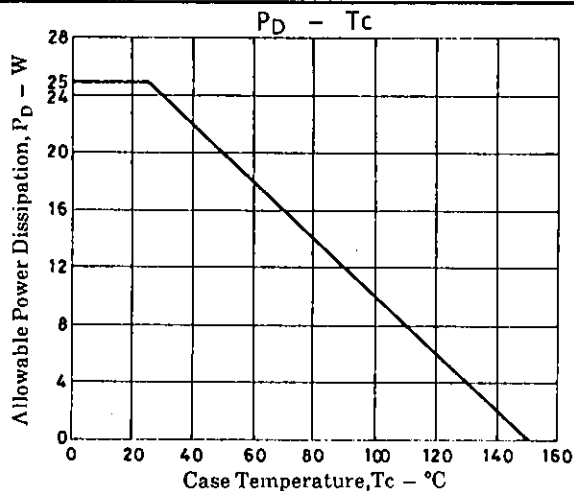
**Package Dimensions 2063A**

(unit: mm)



SANYO : TO-220ML





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