

**SANYO**

No.3769A

**2SK1468**

N-Channel MOS Silicon FET

Very High-Speed  
Switching Applications**Features**

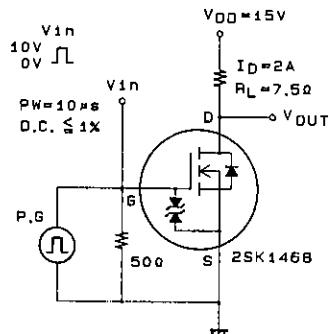
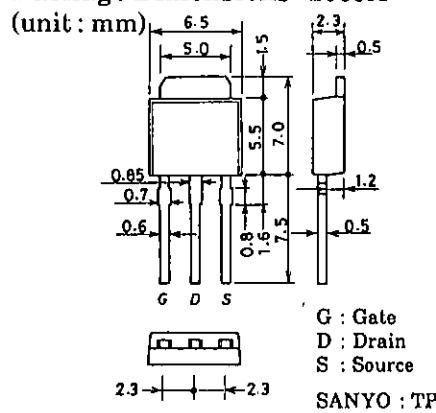
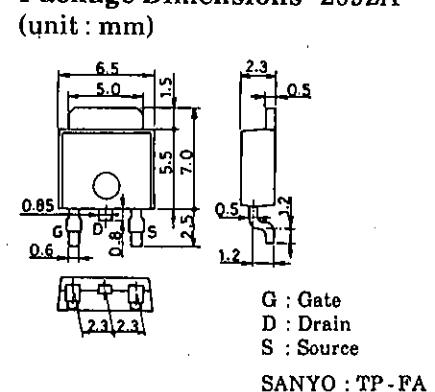
- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.

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

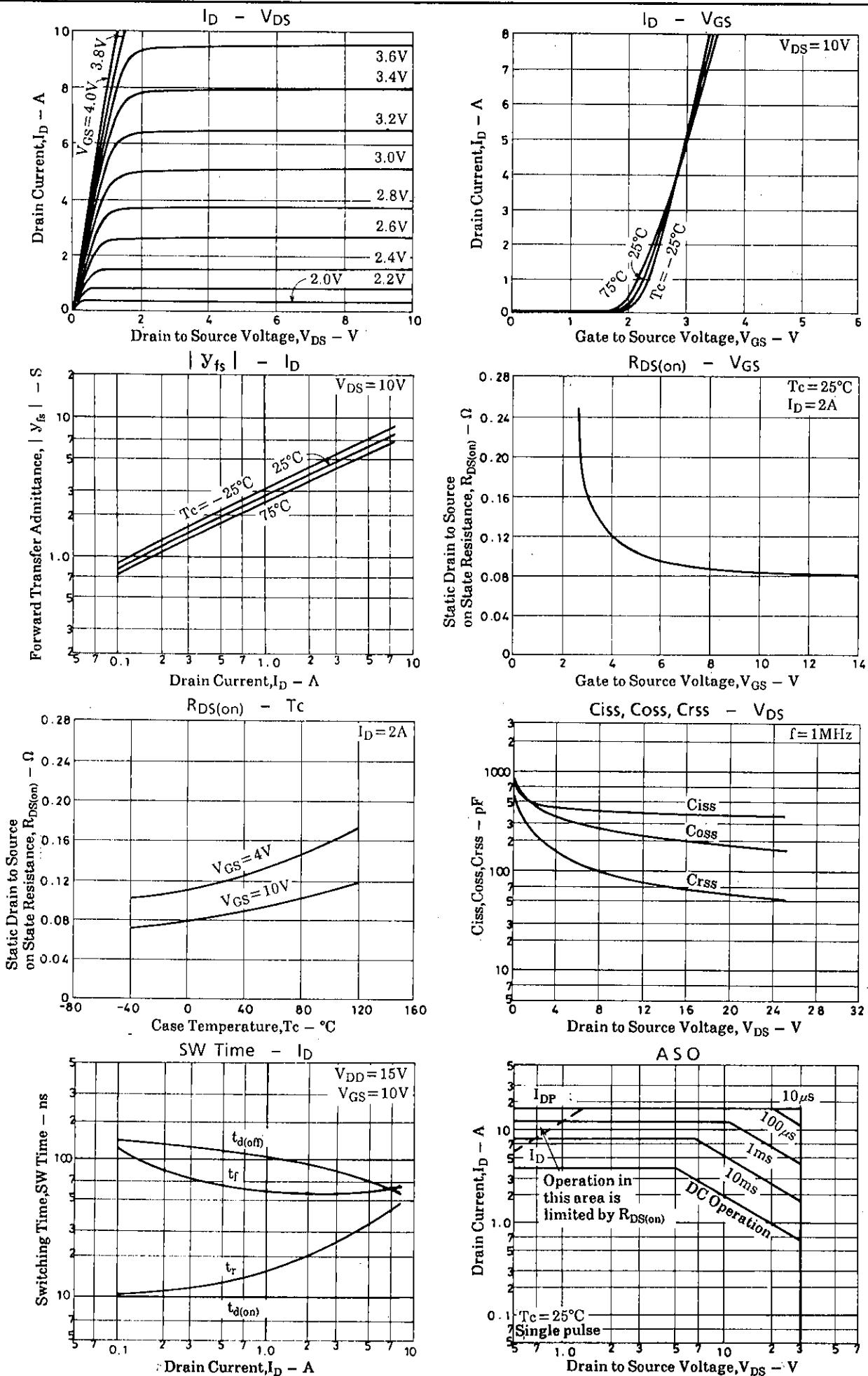
		unit
Drain to Source Voltage	V <sub>DSS</sub>	30 V
Gate to Source Voltage	V <sub>GSS</sub>	$\pm 15$ V
Drain Current(DC)	I <sub>D</sub>	4 A
Drain Current(Pulse)	I <sub>DP</sub>	PW $\leq 10\ \mu s$ , duty cycle $\leq 1\%$ 16 A
Allowable Power Dissipation	P <sub>D</sub>	1.0 W
		T <sub>c</sub> = 25°C 20 W
Channel Temperature	T <sub>ch</sub>	150 °C
Storage Temperature	T <sub>tsg</sub>	-55 to +150 °C

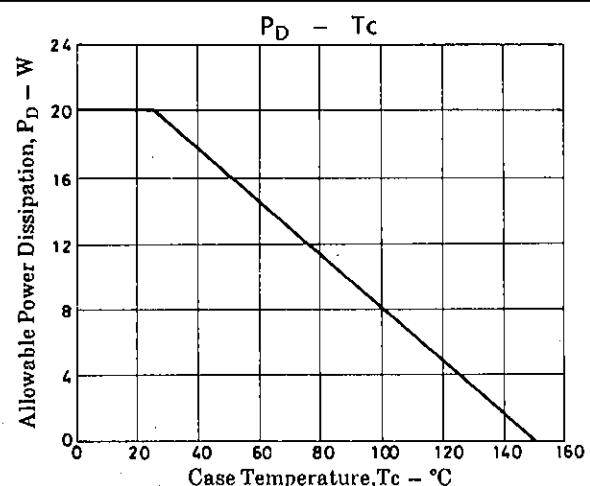
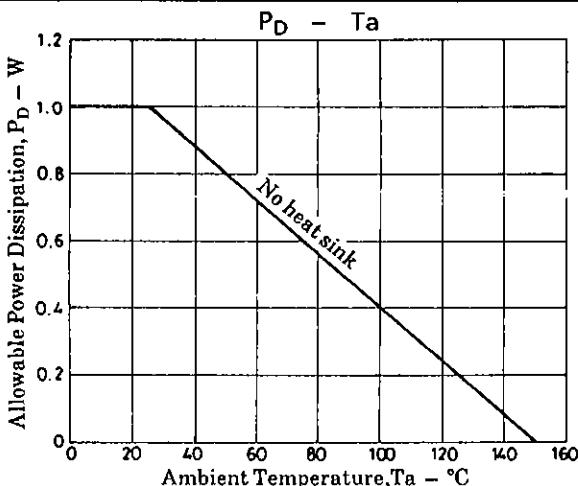
**Electrical Characteristics at Ta = 25°C**

		min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	30			V
G-S Breakdown Voltage	V <sub>(BR)GSS</sub>	$\pm 15$			V
Zero Gate Voltage	I <sub>DSS</sub>			100	μA
Drain Current					
Gate to Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> = ± 12V, 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> = 2A	2.5	4	S
Static Drain to Source	R <sub>D(on)</sub>	I <sub>D</sub> = 2A, V <sub>GS</sub> = 10V	0.085	0.12	Ω
on State Resistance	R <sub>D(on)</sub>	I <sub>D</sub> = 2A, V <sub>GS</sub> = 4V	0.12	0.17	Ω
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = 10V, f = 1MHz	400		pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = 10V, f = 1MHz	250		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = 10V, f = 1MHz	90		pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See specified Test Circuit.	10		ns
Rise Time	t <sub>r</sub>	"	20		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	"	90		ns
Fall Time	t <sub>f</sub>	"	60		ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = 4A, V <sub>GS</sub> = 0	1.0	1.5	V

**Switching Time Test Circuit****Package Dimensions 2083A****Package Dimensions 2092A**

**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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