

<b>SANYO</b>	No.3761A	<b>2SJ188</b>
		P-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**

Drain to Source Voltage	V <sub>DSS</sub>	-30	V
Gate to Source Voltage	V <sub>GSS</sub>	±15	V
Drain Current (DC)	I <sub>D</sub>	-2	A
Drain Current (Pulse)	I <sub>DP</sub>	-8	A
Allowable Power Dissipation	P <sub>D</sub>	20	W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

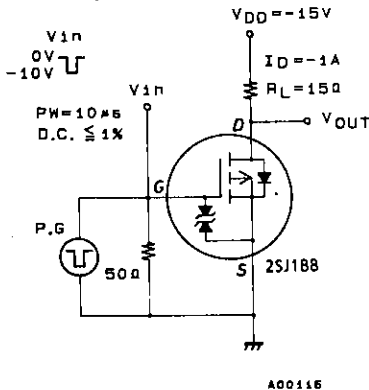
PW ≤ 10 μs, duty cycle ≤ 1%  
T<sub>c</sub> = 25°C

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

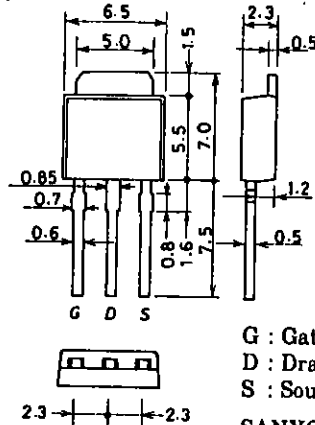
		min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	-30			V
G-S Breakdown Voltage	V <sub>(BR)GSS</sub>	±15			V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>			-100	μA
Gate to Source Leakage Current	I <sub>GSS</sub>			±10	μA
Cutoff Voltage	V <sub>GS(off)</sub>	-1.0		-2.0	V
Forward Transfer Admittance	Y <sub>fs</sub>	1.2	2		S
Static Drain to Source on State Resistance	R <sub>DSON</sub>		0.2	0.3	Ω
	R <sub>DSON</sub>		0.3	0.45	Ω
Input Capacitance	C <sub>iss</sub>		400		pF
Output Capacitance	C <sub>oss</sub>		280		pF
Reverse Transfer Capacitance	C <sub>rss</sub>		110		pF
Turn-ON Delay Time	t <sub>d(on)</sub>		12		ns
Rise Time	t <sub>r</sub>		25		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>		105		ns
Fall Time	t <sub>f</sub>		75		ns
Diode Forward Voltage	V <sub>SD</sub>	-1.0	-1.5		V

I<sub>D</sub> = -1mA, V<sub>GS</sub> = 0  
I<sub>G</sub> = ±100 μA, V<sub>DS</sub> = 0  
V<sub>DS</sub> = -30V, V<sub>GS</sub> = 0  
V<sub>GS</sub> = ±12V, V<sub>DS</sub> = 0  
V<sub>DS</sub> = -10V, I<sub>D</sub> = -1mA  
V<sub>DS</sub> = -10V, I<sub>D</sub> = -1A  
I<sub>D</sub> = -1A, V<sub>GS</sub> = -10V  
I<sub>D</sub> = -1A, V<sub>GS</sub> = -4V  
V<sub>DS</sub> = -10V, f = 1MHz  
V<sub>DS</sub> = -10V, f = 1MHz  
V<sub>DS</sub> = -10V, f = 1MHz  
See specified Test Circuit  
I<sub>S</sub> = -2A, V<sub>GS</sub> = 0

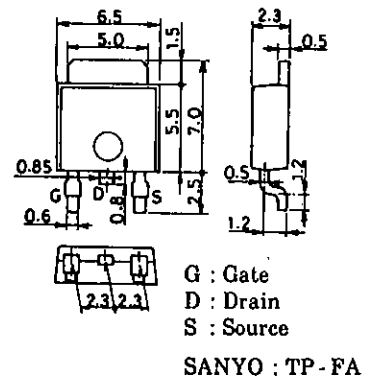
**Switching Time Test Circuit**

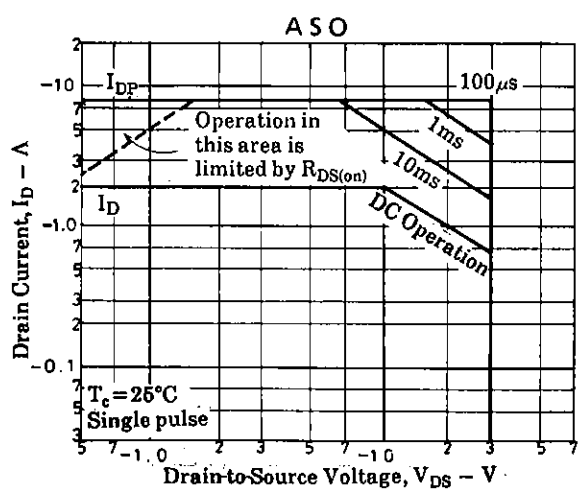
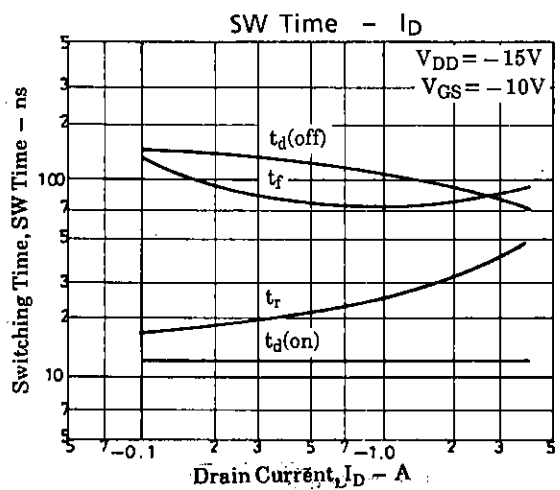
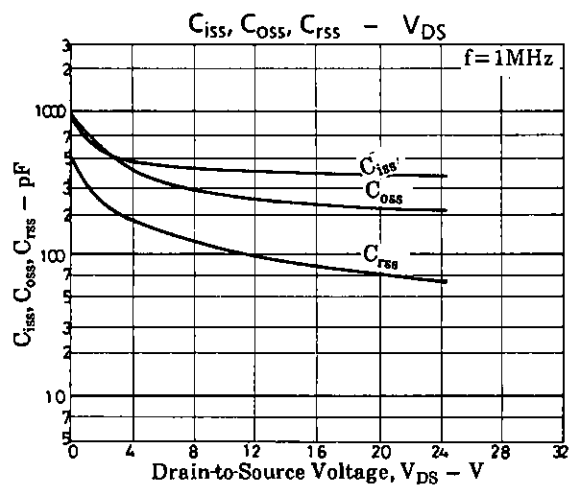
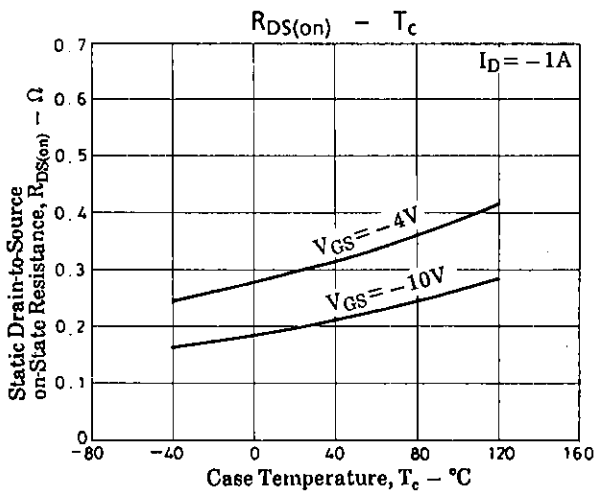
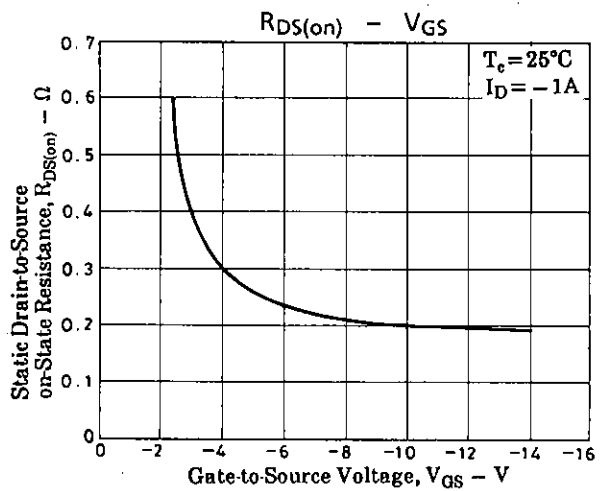
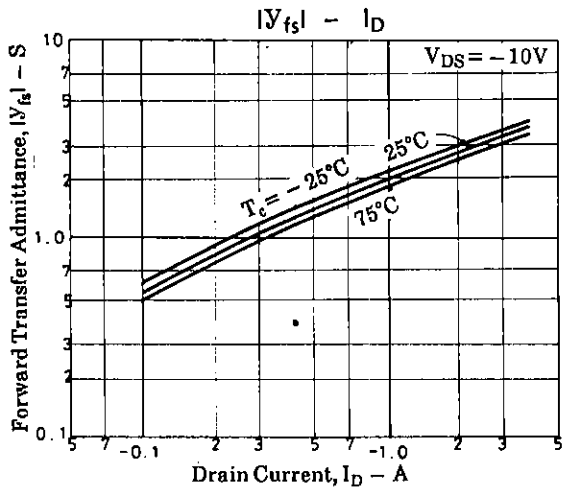
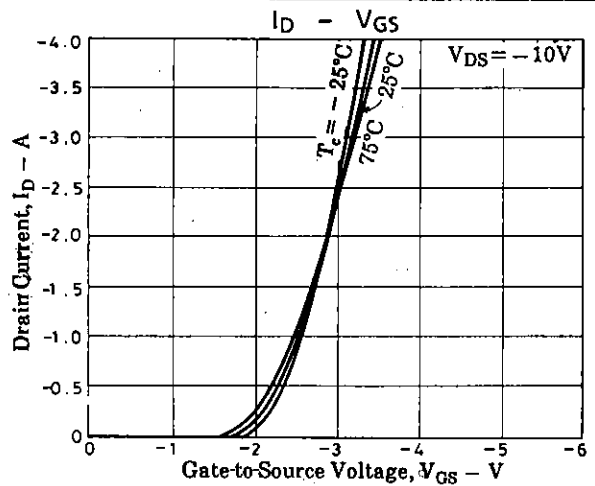
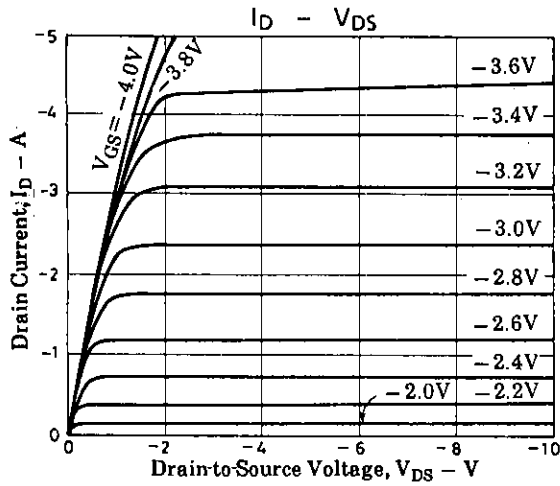


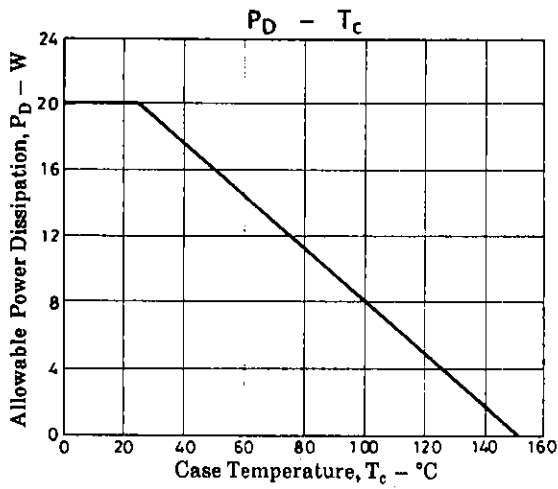
**Package Dimensions 2083A (unit: mm)**



**Package Dimensions 2092A (unit: mm)**







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