

<b>SANYO</b>	No.3762A	<b>2SJ189</b>
P-Channel MOS Silicon FET		
Very High-Speed Switching Applications		

**Features**

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

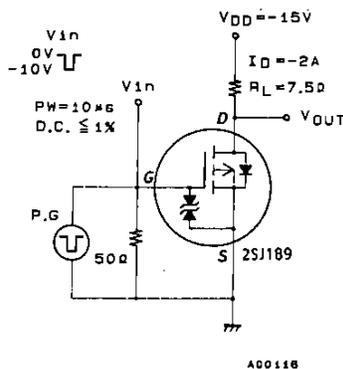
**Absolute Maximum Ratings at Ta = 25°C**

			unit
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>	-4	A
Drain Current (Pulse)	I <sub>DP</sub>	PW ≤ 10μs, duty cycle ≤ 1%	A
Allowable Power Dissipation	P <sub>D</sub>	T <sub>c</sub> = 25°C	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**

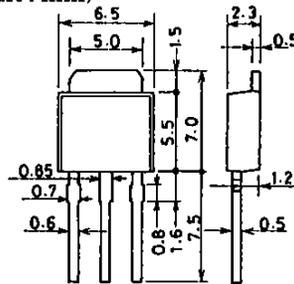
			min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = -1mA, V <sub>GS</sub> = 0	-30			V
G-S Breakdown Voltage	V <sub>(BR)GSS</sub>	I <sub>G</sub> = ±100μA, V <sub>DS</sub> = 0	±15			V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = -30V, V <sub>GS</sub> = 0			-100	μA
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 on State Resistance	R <sub>DS(on)</sub>	I <sub>D</sub> = -2A, V <sub>GS</sub> = -10V		85	120	mΩ
	R <sub>DS(on)</sub>	I <sub>D</sub> = -2A, V <sub>GS</sub> = -4V		120	170	mΩ
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = -10V, f = 1MHz		1000		pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = -10V, f = 1MHz		600		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = -10V, f = 1MHz		220		pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See specified Test Circuit		15		ns
Rise Time	t <sub>r</sub>	∕		50		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	∕		145		ns
Fall Time	t <sub>f</sub>	∕		145		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**

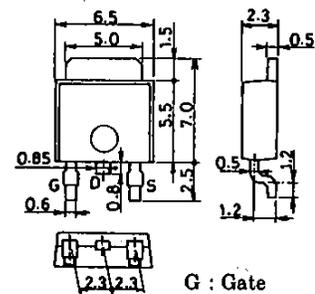
(unit: mm)



G : Gate  
D : Drain  
S : Source  
SANYO : TP

**Package Dimensions 2092A**

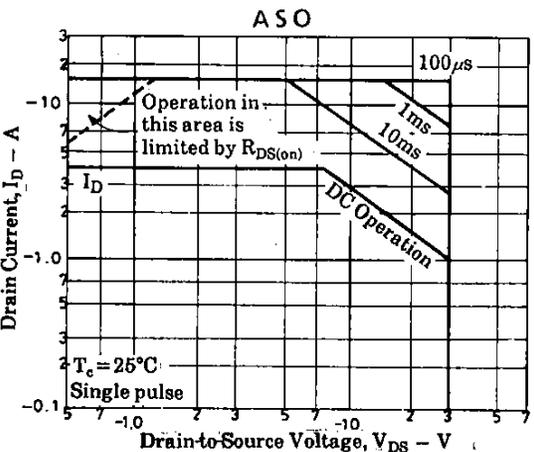
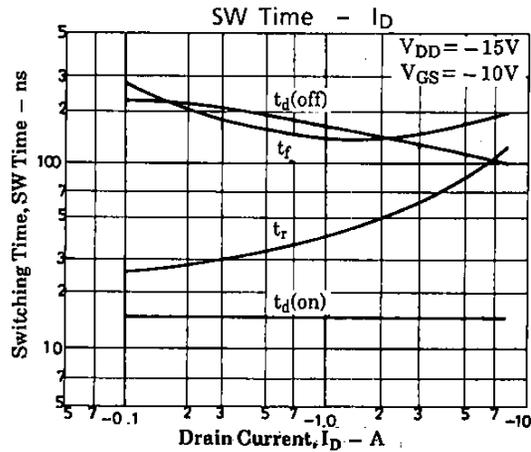
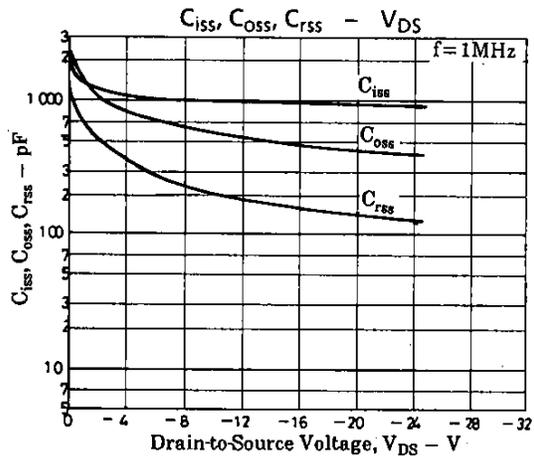
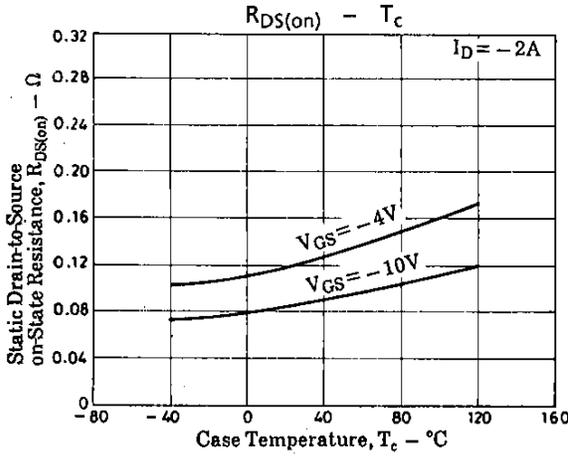
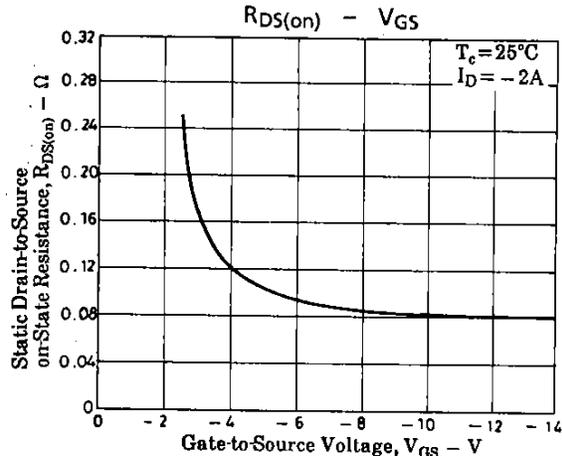
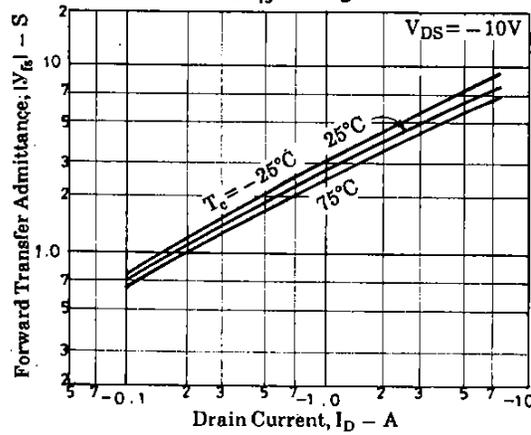
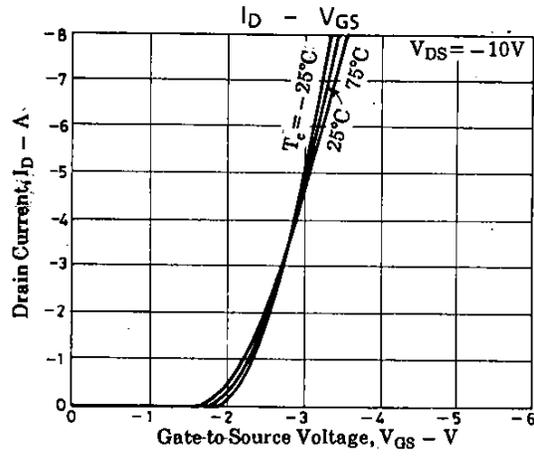
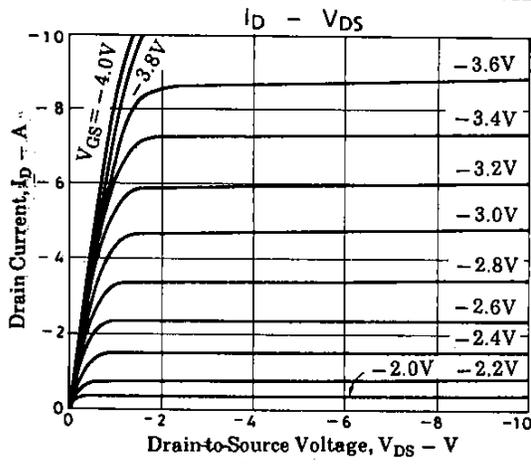
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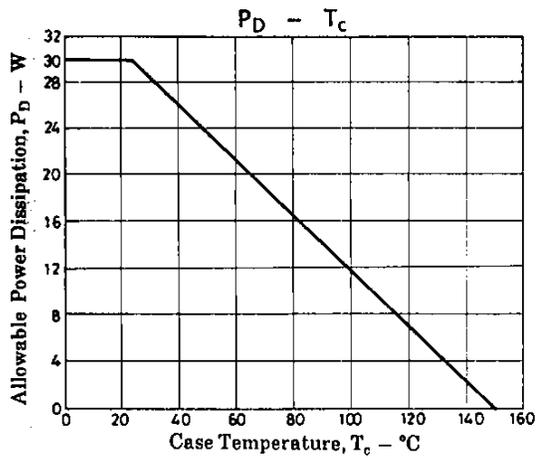


G : Gate  
D : Drain  
S : Source  
SANYO : TP-FA

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