

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

Features

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

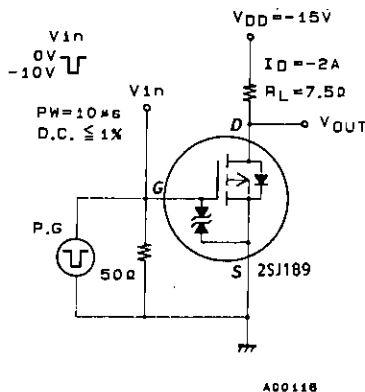
Absolute Maximum Ratings at Ta = 25°C

			unit
Drain to Source Voltage	V _{DSS}	-30	V
Gate to Source Voltage	V _{GSS}	±15	V
Drain Current (DC)	I _D	-4	A
Drain Current (Pulse)	I _{DP}	PW ≤ 10 μs, duty cycle ≤ 1%	-16 A
Allowable Power Dissipation	P _D	T _c = 25°C	30 W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

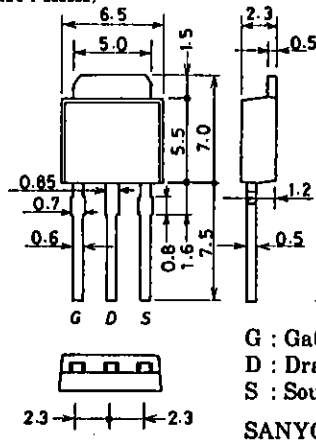
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = -1mA, V _{GS} = 0	-30			V
G-S Breakdown Voltage	V _{(BR)GSS}	I _G = ±100 μA, V _{DS} = 0	±15			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = -30V, V _{GS} = 0			-100	μA
Gate to Source Leakage Current	I _{GSS}	V _{GS} = ±12V, 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 = -2A	2.5	4		S
Static Drain to Source on State Resistance	R _{DS(on)}	I _D = -2A, V _{GS} = -10V		85	120	mΩ
	R _{DS(on)}	I _D = -2A, V _{GS} = -4V		120	170	mΩ
Input Capacitance	C _{iss}	V _{DS} = -10V, f = 1MHz		1000		pF
Output Capacitance	C _{oss}	V _{DS} = -10V, f = 1MHz		600		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = -10V, f = 1MHz		220		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit		15		ns
Rise Time	t _r	„		50		ns
Turn-OFF Delay Time	t _{d(off)}	„		145		ns
Fall Time	t _f	„		145		ns
Diode Forward Voltage	V _{SD}	I _S = -4A, V _{GS} = 0	-1.0	-1.5		V

Switching Time Test Circuit

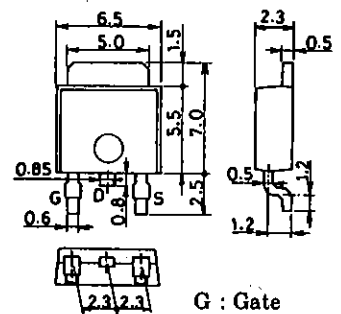


Package Dimensions 2083A (unit: mm)



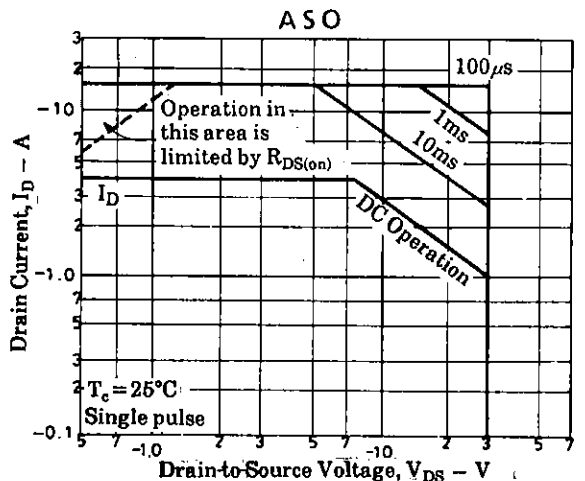
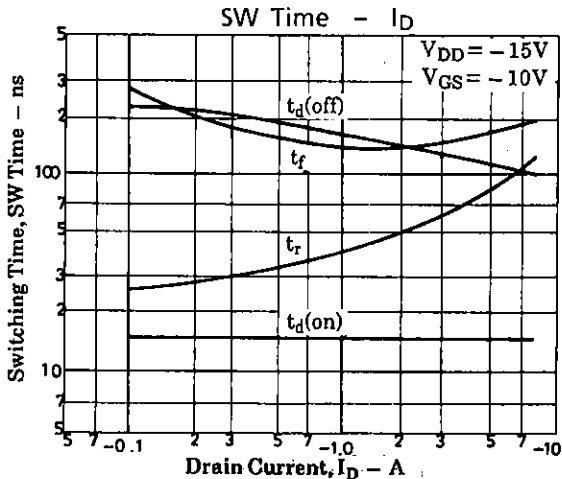
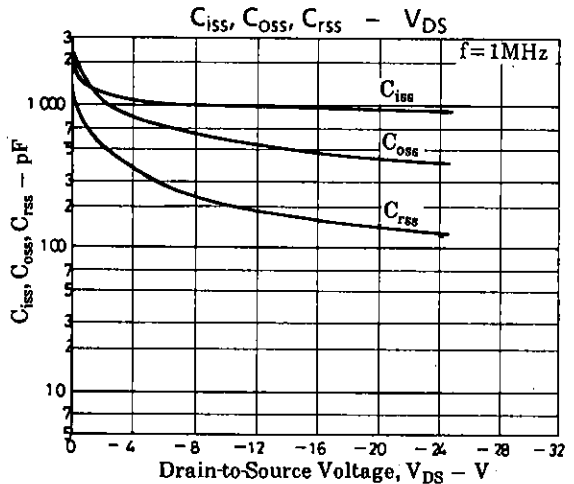
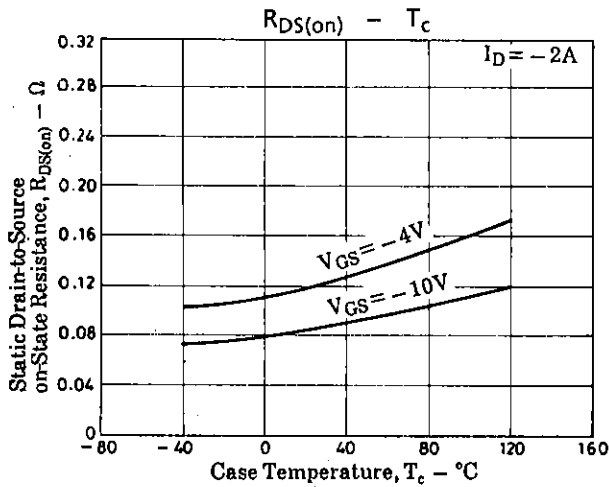
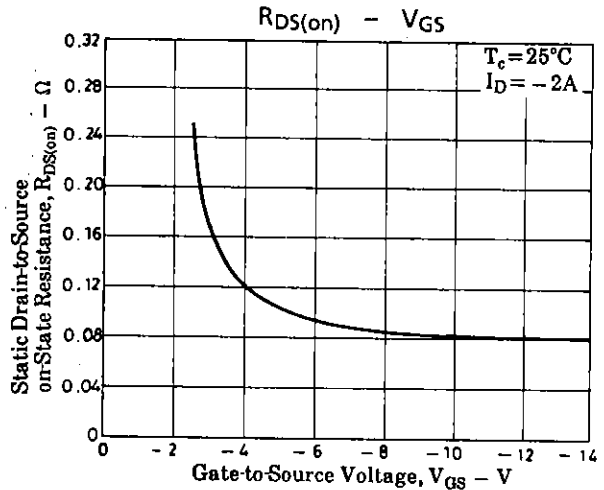
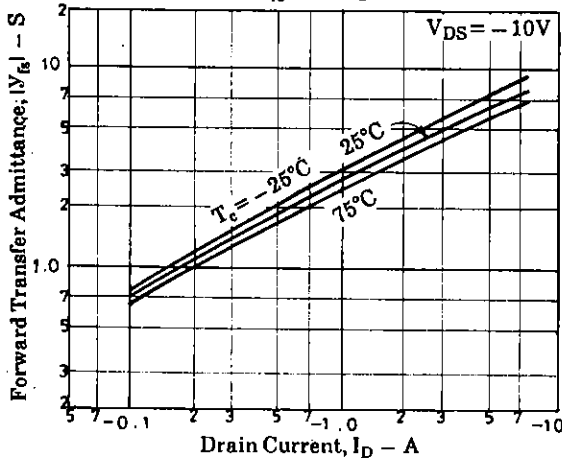
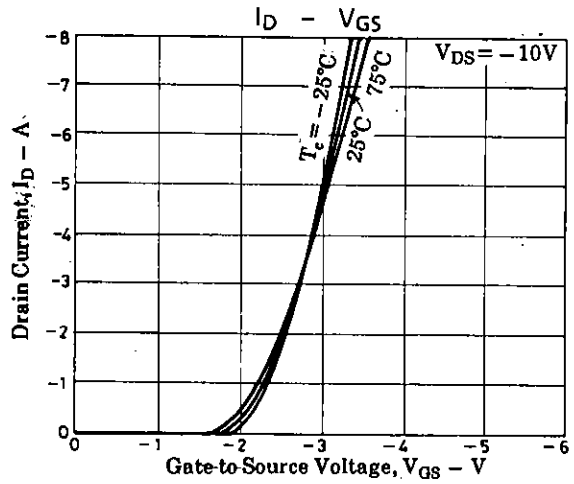
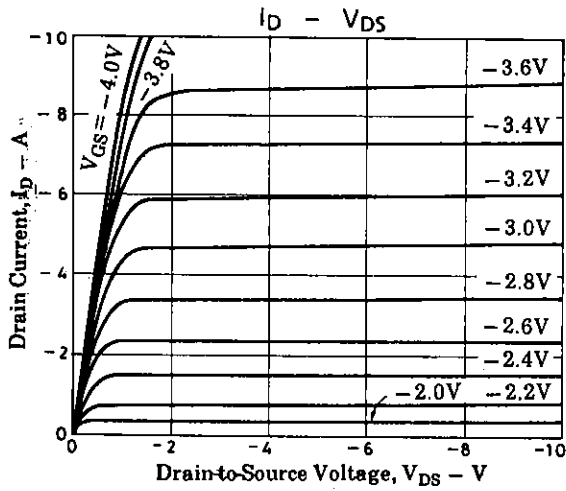
G : Gate
D : Drain
S : Source
SANYO : TP

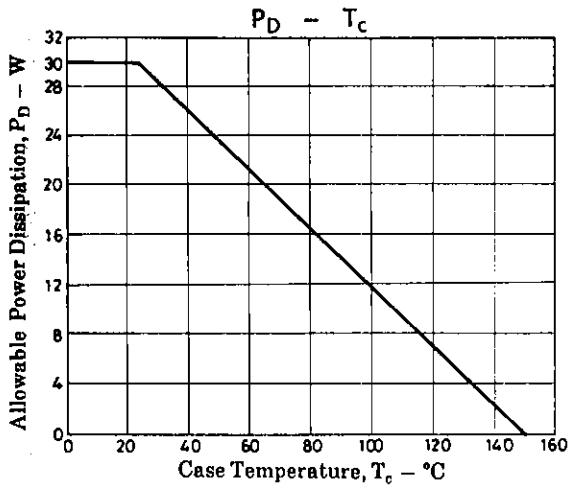
Package Dimensions 2092A (unit: mm)



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

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