

SANYO	No.5057	2SJ382
		P-Channel MOS Silicon FET Very High-Speed Switching Applications

Features

- Low ON resistance.
- Very high-speed switching.
- 2.5V drive.

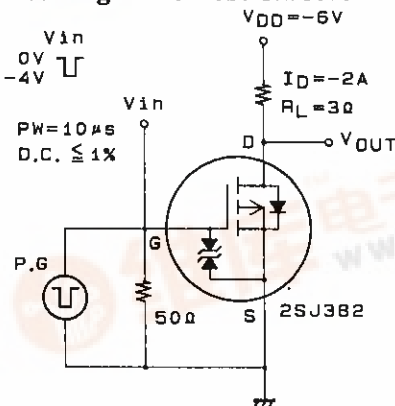
Absolute Maximum Ratings at Ta = 25°C

			unit
Drain-to-Source Voltage	V _{DSS}	-12	V
Gate-to-Source Voltage	V _{GSS}	±10	V
Drain Current (DC)	I _D	-4	A
Drain Current (Pulse)	I _{DP}	PW ≤ 10μs, duty cycle ≤ 1%	-16 A
Allowable Power Dissipation	P _D	1	W
		Tc = 25°C	20 W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

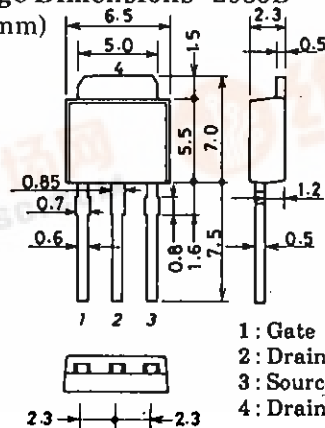
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = -1mA, V _{GS} = 0	-12			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} = -10V, V _{GS} = 0			-100	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±8V, V _{DS} = 0			±10	μA
Gate-to-Source Cutoff Voltage	V _{GS(off)}	V _{DS} = -6V, I _D = -1mA	-0.5		-1.5	V
Forward Transfer Admittance	y _{fs}	V _{DS} = -6V, I _D = -2A	2.5	4		S
Static Drain-to-Source ON-State Resistance	R _{DS(on)}	I _D = -2A, V _{GS} = -4V		135	177	mΩ
Input Capacitance	C _{iss}	V _{DS} = -6V, f = 1MHz		400		pF
Output Capacitance	C _{oss}	V _{DS} = -6V, f = 1MHz		370		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = -6V, f = 1MHz		160		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		20		ns
Rise Time	t _r	∞		120		ns
Turn-OFF Delay Time	t _{d(off)}	∞		140		ns
Fall Time	t _f	∞		180		ns
Diode Forward Voltage	V _{SD}	I _S = -4A, V _{GS} = 0	-1.0	-1.2		V

Switching Time Test Circuit

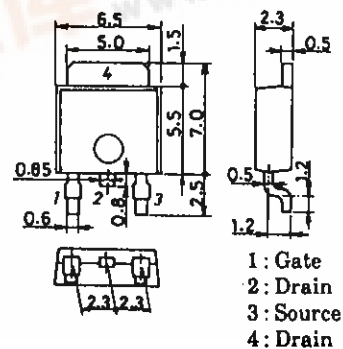


Package Dimensions 2083B (unit: mm)



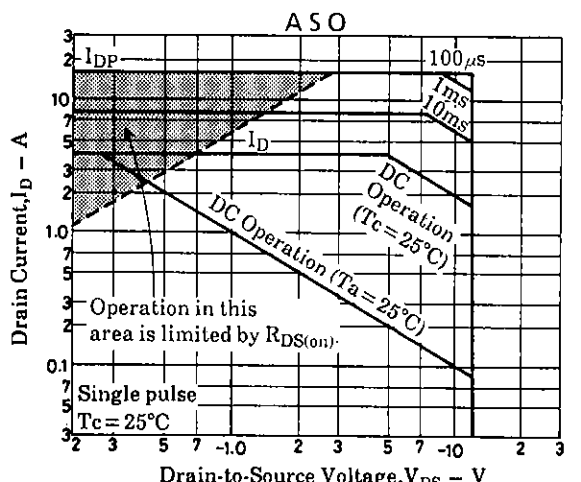
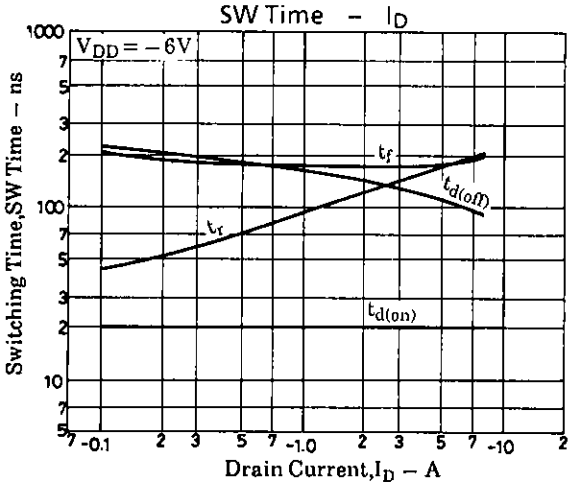
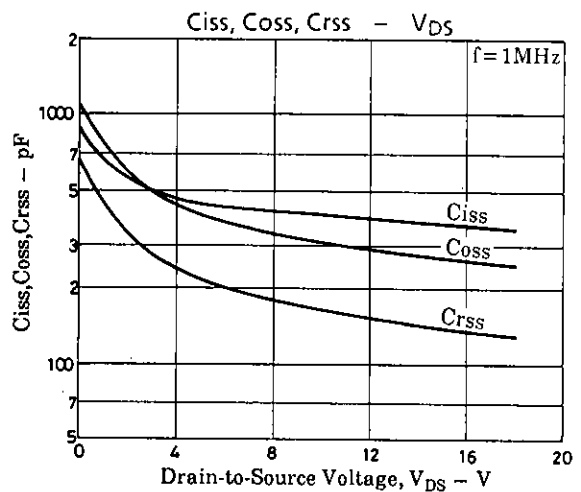
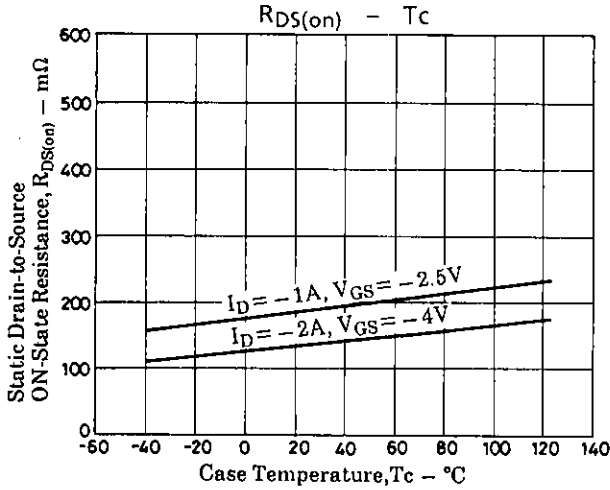
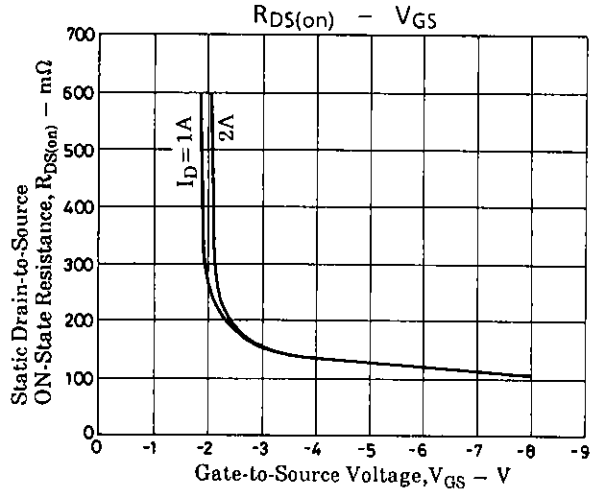
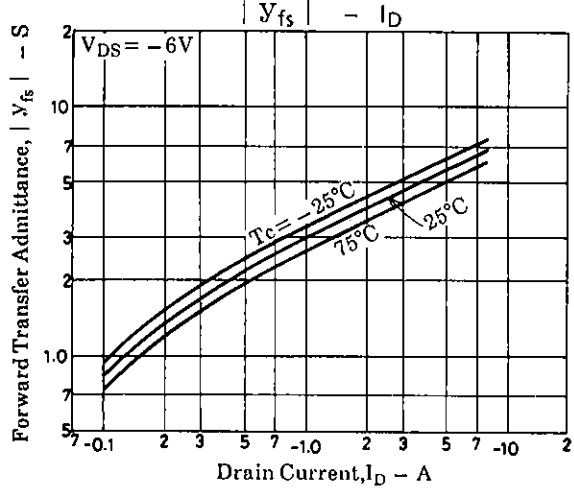
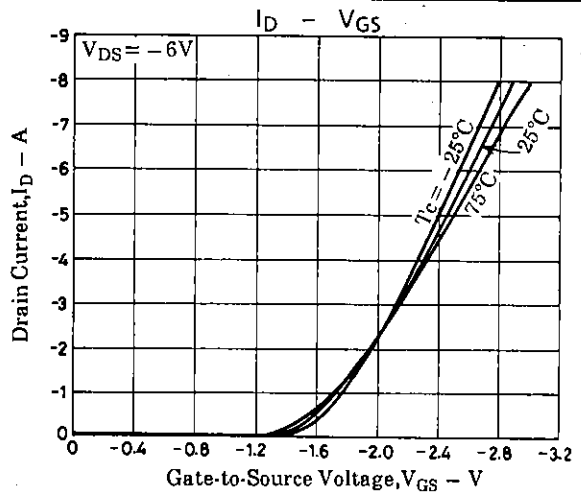
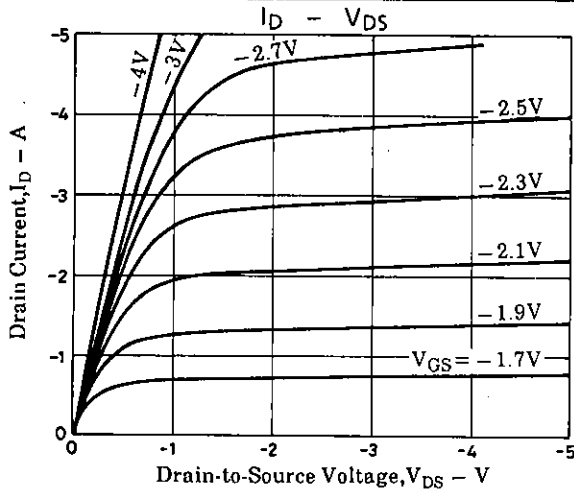
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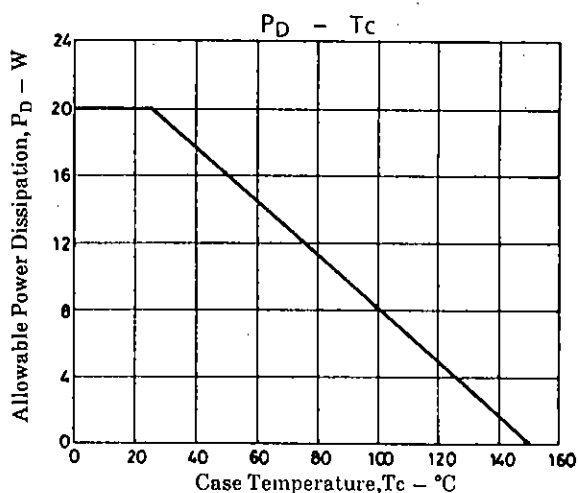
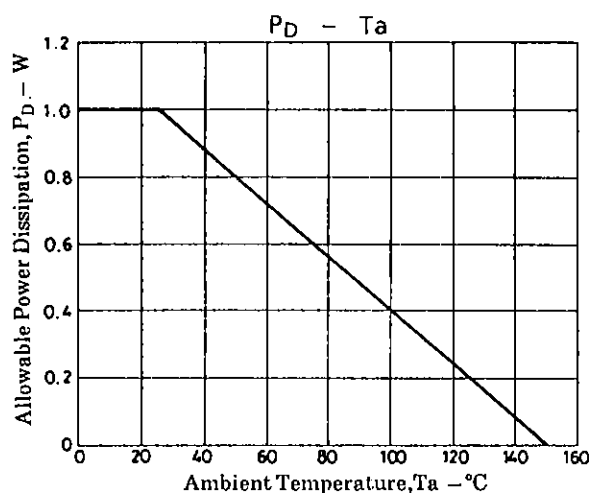
Package Dimensions 2092B (unit: mm)



SANYO: TP-FA







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