

SANYO	No.3509A	2SJ187
		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

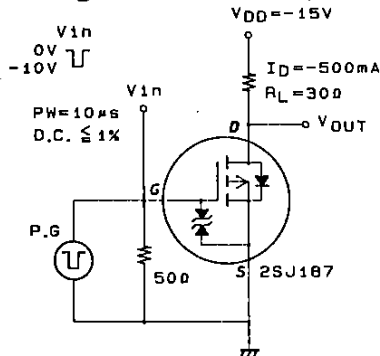
			unit
Drain to Source Voltage	V _{DS}	-30	V
Gate to Source Voltage	V _{GS}	±15	V
Drain Current (DC)	I _D	-1	A
Drain Current (Pulse)	I _{DP}	-4	A
Allowable Power Dissipation	P _D	3.5	W
		PW ≤ 10 μs, duty cycle ≤ 1%	
		T _c = 25°C	
		Mounted on ceramic board (250mm ² × 0.8mm)	
Channel Temperature	T _{ch}	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
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 = -500mA	0.6	1.0		S
Static Drain to Source on State Resistance	R _{DSON}	I _D = -500mA, V _{GS} = -10V		0.5	0.75	Ω
	R _{DSON}	I _D = -500mA, V _{GS} = -4V		0.75	1.1	Ω
Input Capacitance	C _{iss}	V _{DS} = -10V, f = 1MHz		170		pF
Output Capacitance	C _{oss}	V _{DS} = -10V, f = 1MHz		110		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = -10V, f = 1MHz		20		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		10		ns
Rise Time	t _r	∕		13		ns
Turn-OFF Delay Time	t _{d(off)}	∕		70		ns
Fall Time	t _f	∕		30		ns
Diode Forward Voltage	V _{SD}	I _S = -1A, V _{GS} = 0		-0.9		V

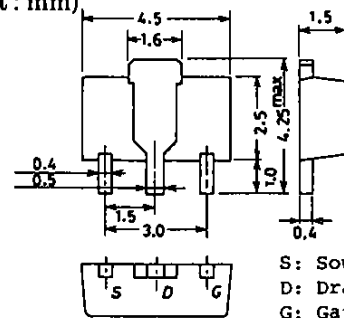
Marking : JA

Switching Time Test Circuit



Package Dimensions 2062

(unit : mm)

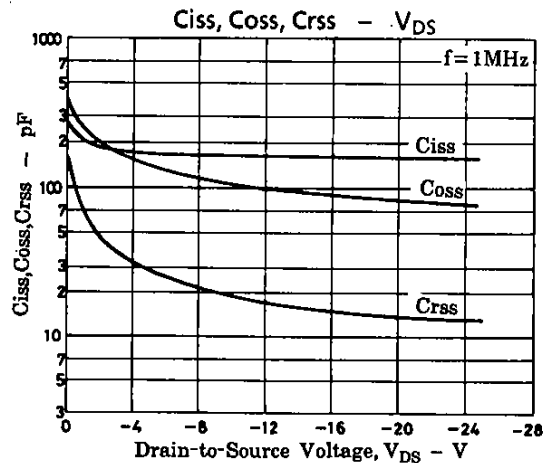
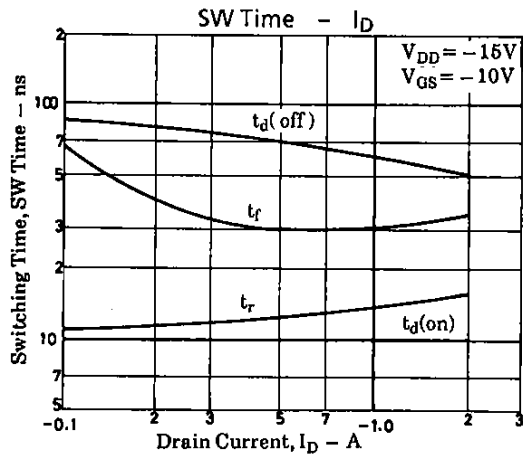
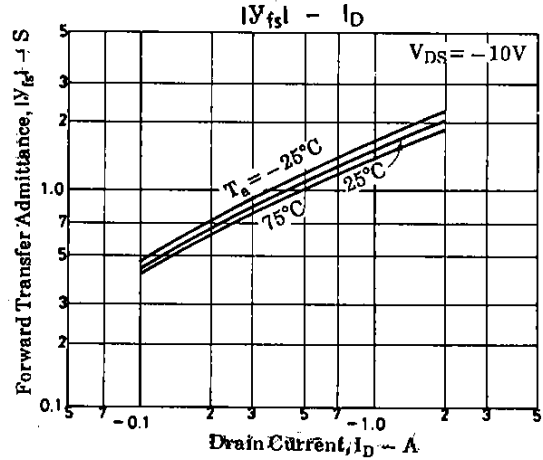
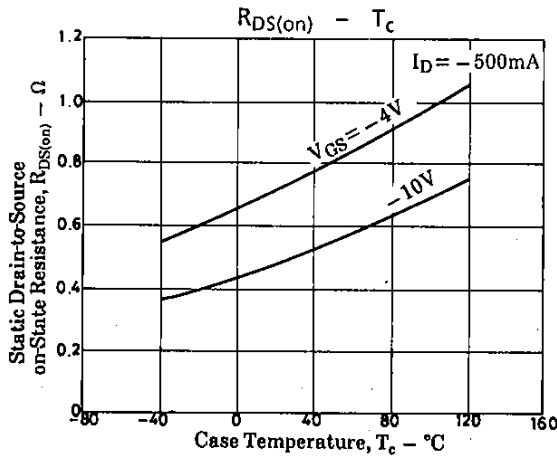
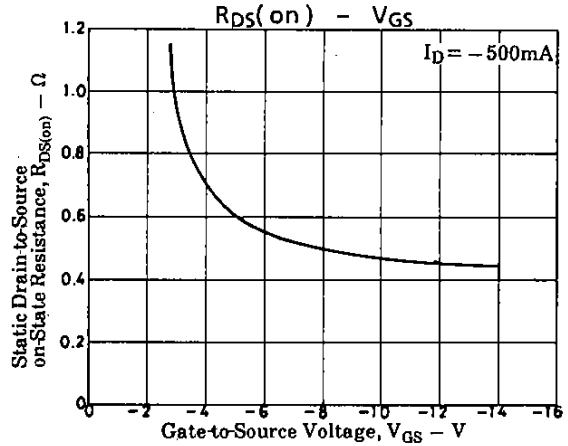
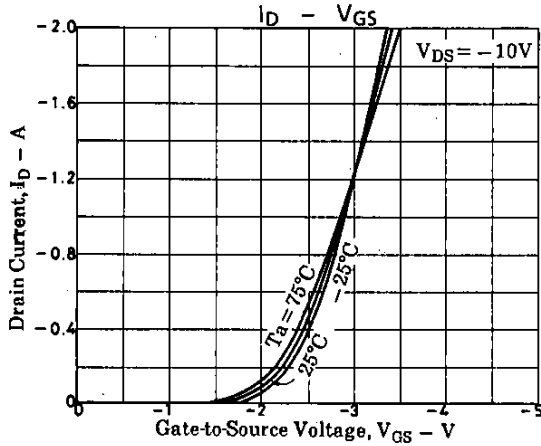
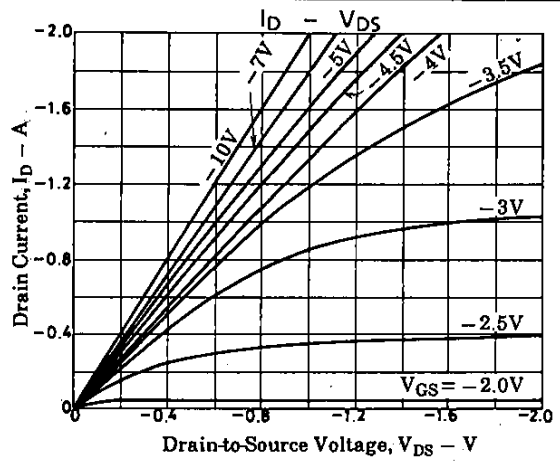
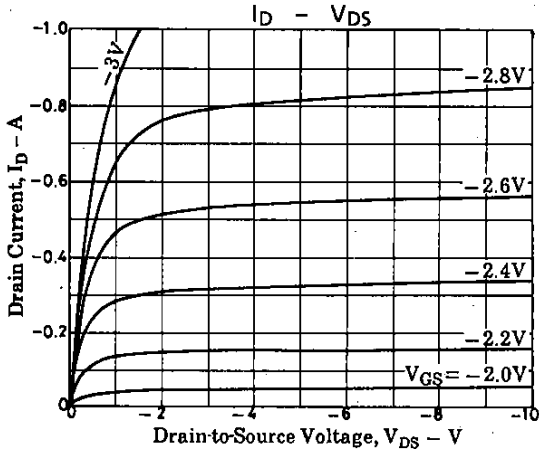


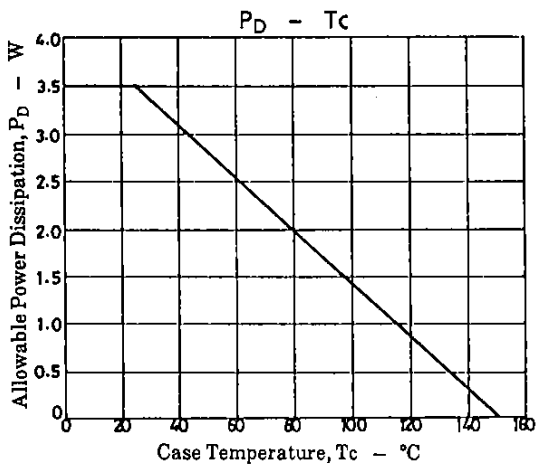
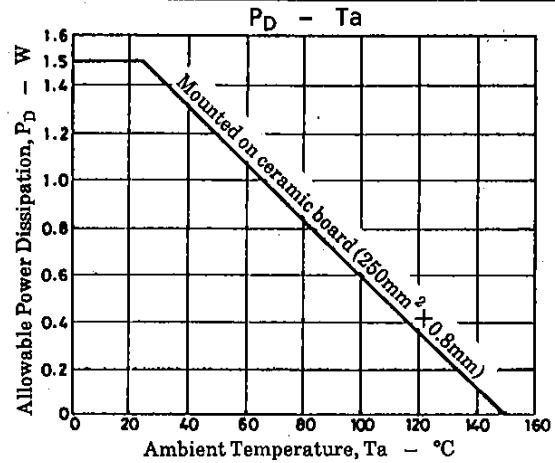
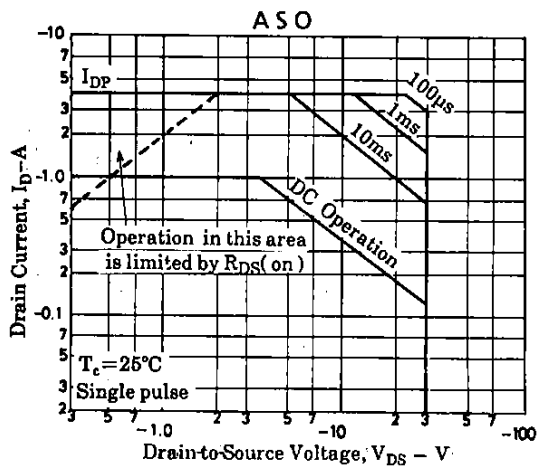
S: Source
D: Drain
G: Gate

SANYO: PCP

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