

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

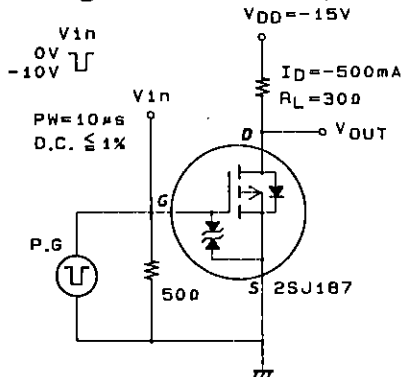
Drain to Source Voltage	V_{DSS}	-30	V	unit
Gate to Source Voltage	V_{GSS}	±15	V	
Drain Current (DC)	I_D	-1	A	
Drain Current (Pulse)	I_{DP}	-4	A	
Allowable Power Dissipation	P_D	PW ≤ 10μs, duty cycle ≤ 1%	3.5	W
		Tc = 25°C	1.5	W
		Mounted on ceramic board (250mm ² × 0.8mm)	1.5	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		-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	$R_{DS(on)}$	$I_D = -500mA, V_{GS} = -10V$		0.5	0.75	Ω
	$R_{DS(on)}$	$I_D = -500mA, V_{GS} = -4V$		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

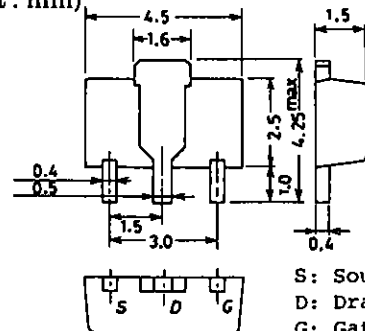
Marking : JA

Switching Time Test Circuit



Package Dimensions 2062

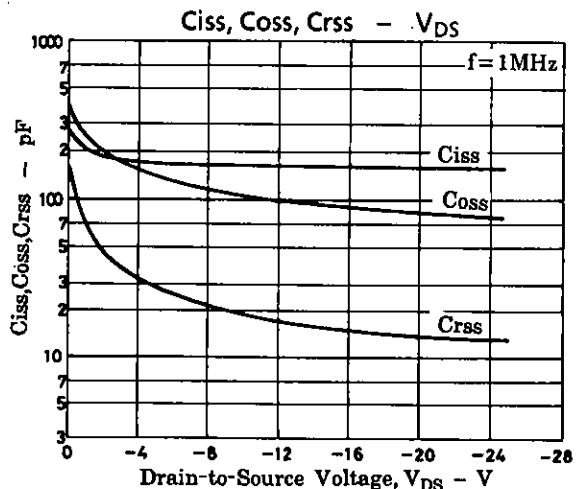
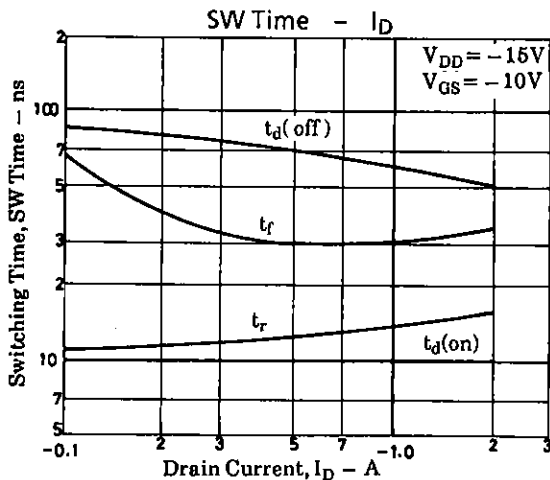
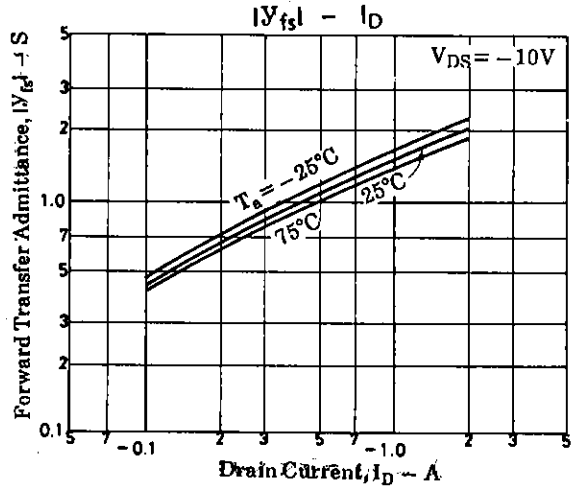
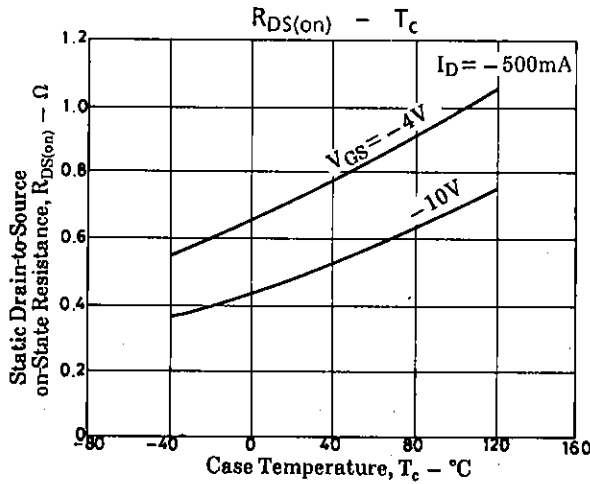
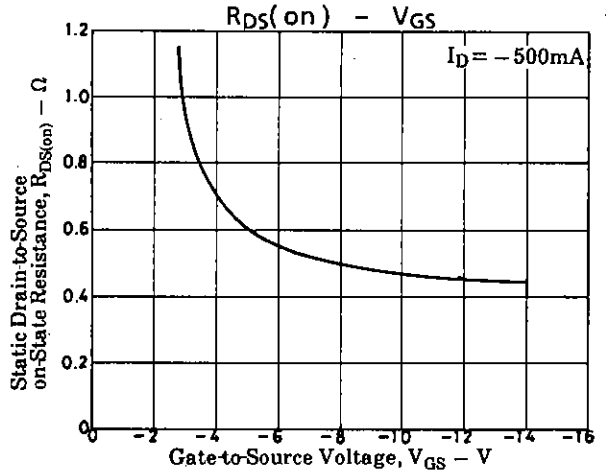
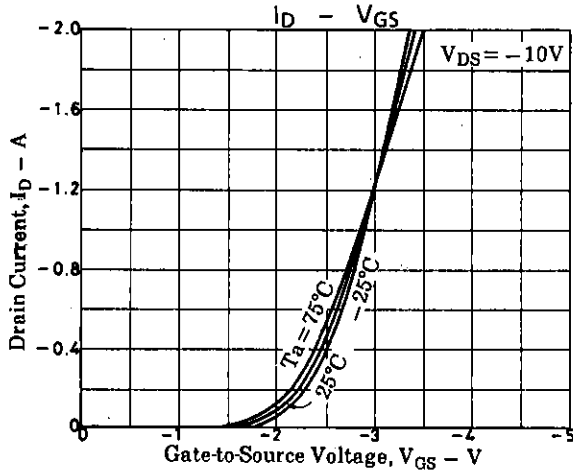
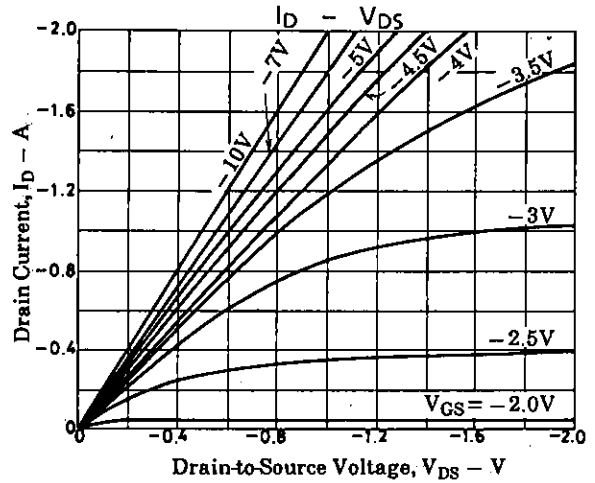
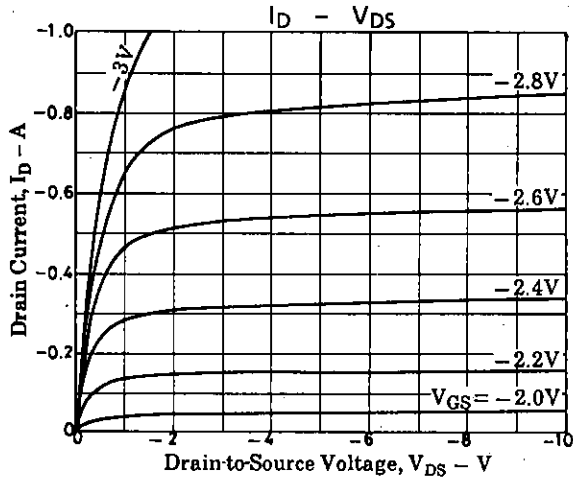
(unit : mm)

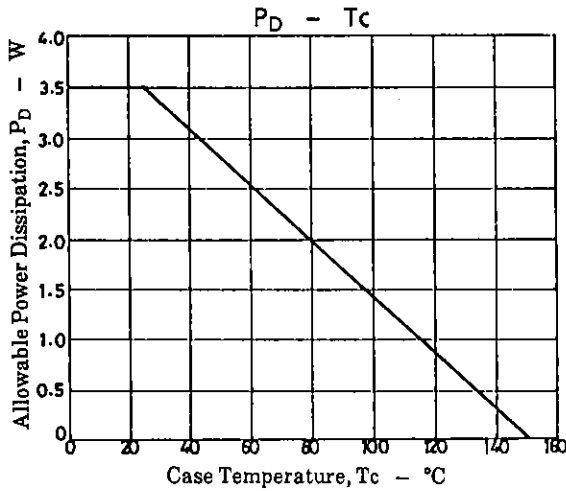
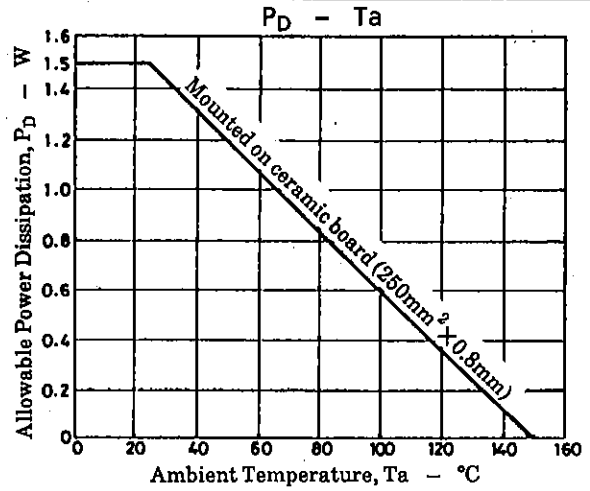
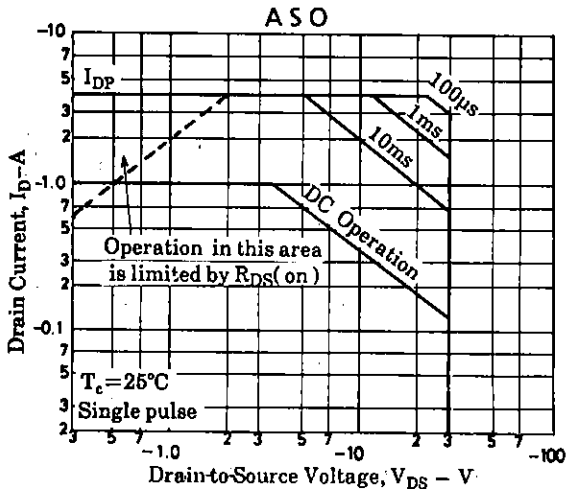


S: Source
D: Drain
G: Gate

SANYO: PCP

SANYO Electric Co., Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN





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