

No.4309

2SJ316**SANYO**

P-Channel MOS Silicon FET

Very High-Speed
Switching Applications**Features**

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

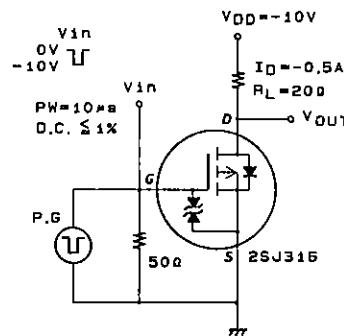
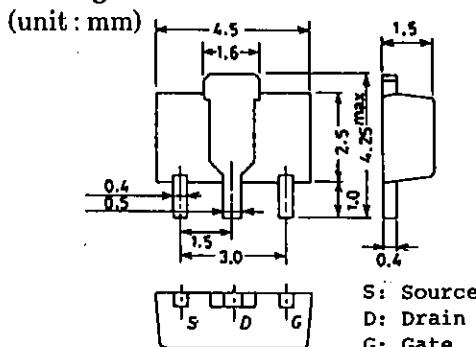
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

			unit
Drain to Source Voltage	V_{DSS}		-12 V
Gate to Source Voltage	V_{GSS}		± 15 V
Drain Current(DC)	I_D		-1 A
Drain Current(Pulse)	I_{DP}	$PW \leq 10\mu\text{s}$, duty cycle $\leq 1\%$	-4 A
Allowable Power Dissipation	P_D	$T_c = 25^\circ\text{C}$	3.5 W
		Mounted on ceramic board (250mm ² × 0.8mm)	1.5 W
Channel Temperature	T_{ch}		150 °C
Storage Temperature	T_{stg}		-55 to +150 °C

Electrical Characteristics at $T_a = 25^\circ\text{C}$

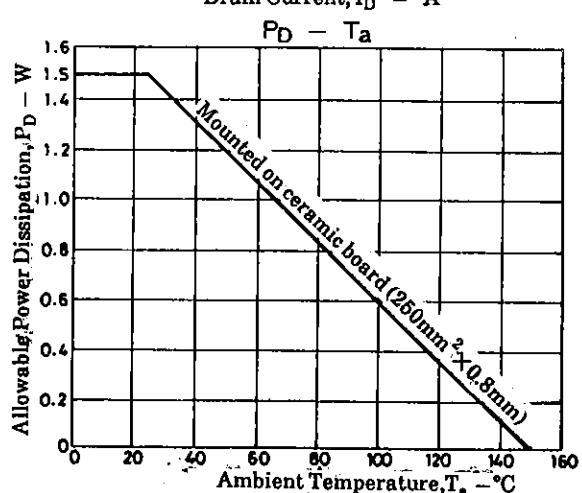
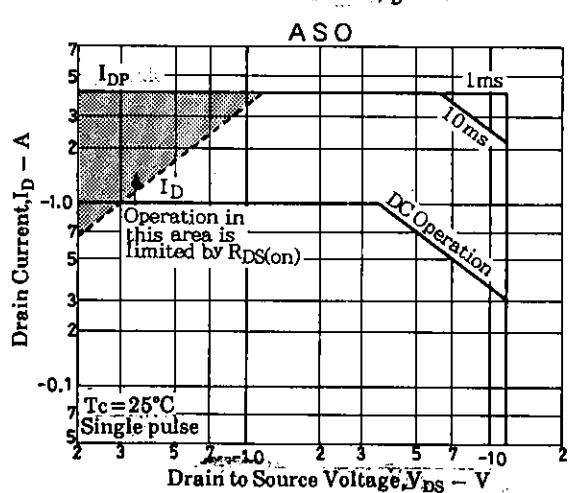
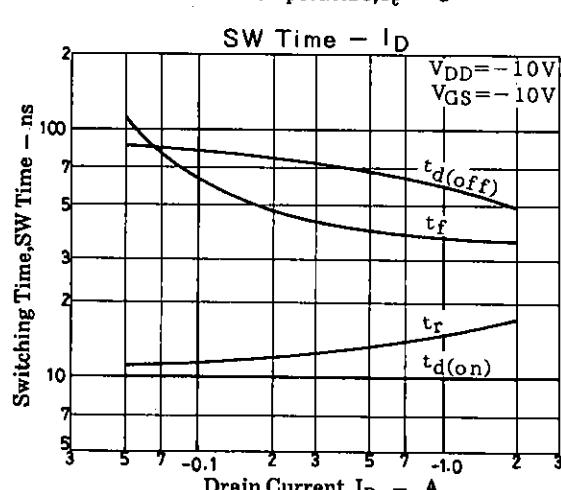
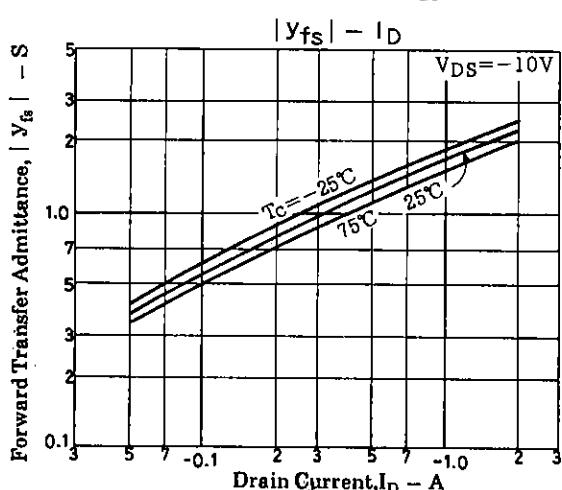
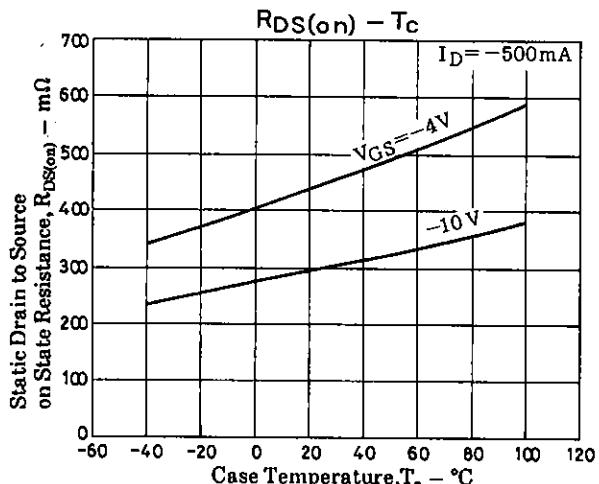
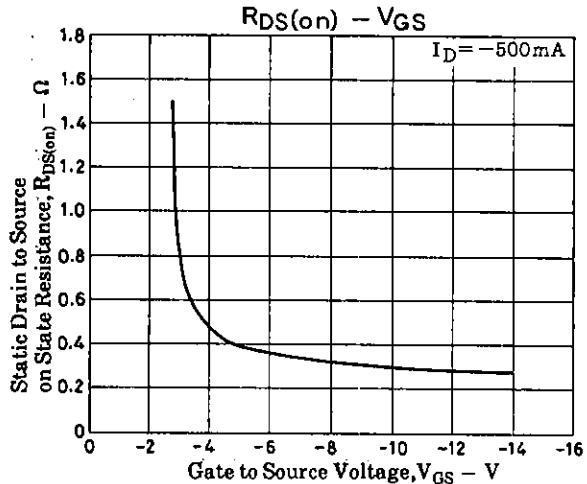
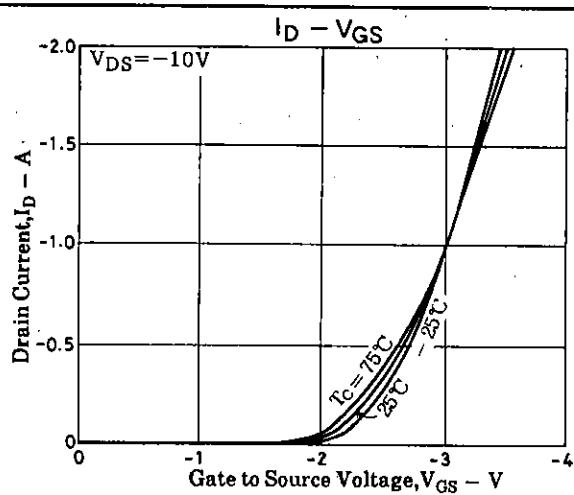
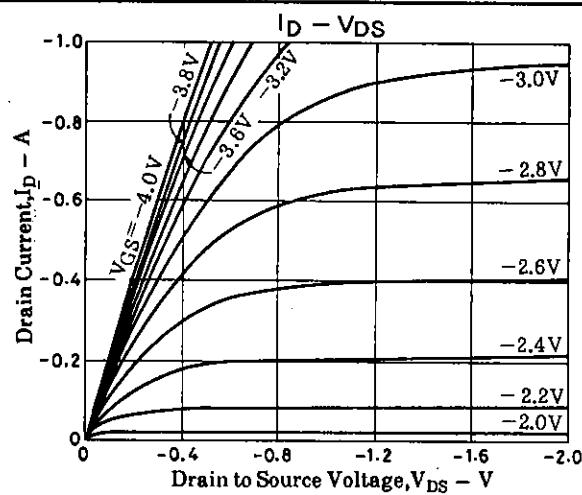
			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -1\text{mA}, V_{GS} = 0$	-12			V
Zero Gate Voltage	I_{DSS}	$V_{DS} = -12\text{V}, V_{GS} = 0$			-100	μA
Drain Current						
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = \pm 12\text{V}, V_{DS} = 0$		± 10		μA
Cutoff Voltage	$V_{GS(\text{off})}$	$V_{DS} = -10\text{V}, I_D = -1\text{mA}$	-1.0		-2.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = -10\text{V}, I_D = -500\text{mA}$	0.7	1.2		S
Static Drain to Source on State Resistance	$R_{DS(\text{on})}$	$I_D = -500\text{mA}, V_{GS} = -10\text{V}$	0.3	0.42		Ω
Input Capacitance	C_{iss}	$V_{DS} = -10\text{V}, f = 1\text{MHz}$	170			pF
Output Capacitance	C_{oss}	$V_{DS} = -10\text{V}, f = 1\text{MHz}$	170			pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -10\text{V}, f = 1\text{MHz}$	40			pF
Turn-ON Delay Time	$t_{d(\text{on})}$	See specified Test Circuit.	10			ns
Rise Time	t_r	"	14			ns
Turn-OFF Delay Time	$t_{d(\text{off})}$	"	70			ns
Fall Time	t_f	"	40			ns
Diode Forward Voltage	V_{SD}	$I_S = -1\text{A}, V_{GS} = 0$	-0.9			V

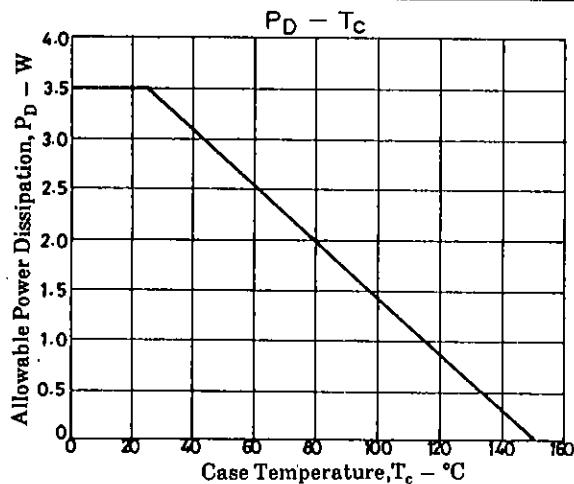
Marking : JG

Switching Time Test Circuit**Package Dimensions 2062**

SANYO: PCP

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