

SANYO	No.4309	2SJ316
		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

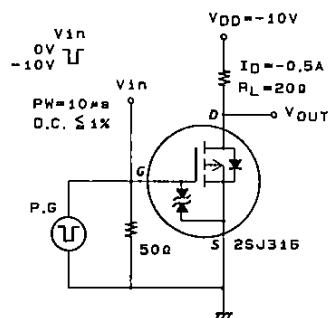
Drain to Source Voltage	V_{DSS}	-12	V		unit
Gate to Source Voltage	V_{GSS}	±15	V		
Drain Current(DC)	I_D	-1	A		
Drain Current(Pulse)	I_{DP}	-4	A		
Allowable Power Dissipation	P_D	3.5	W		
		PW ≤ 10 μs, duty cycle ≤ 1%			
		Tc = 25°C			
		Mounted on ceramic board (250mm ² × 0.8mm)			
		1.5	W		
Channel Temperature	Tch	150	°C		
Storage Temperature	Tstg	-55 to +150	°C		

Electrical Characteristics at Ta = 25°C

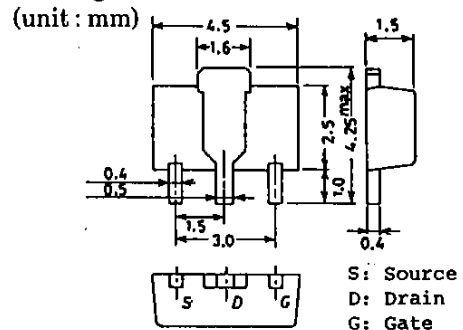
			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -1mA, V_{GS} = 0$	-12			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -12V, V_{GS} = 0$			-100	μA
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = ±12V, V_{DS} = 0$			±10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = -10V, I_D = -1mA$	-1.0		-2.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = -10V, I_D = -500mA$	0.7	1.2		S
Static Drain to Source on State Resistance	$R_{DS(on)}$	$I_D = -500mA, V_{GS} = -10V$		0.3	0.42	Ω
	$R_{DS(on)}$	$I_D = -500mA, V_{GS} = -4V$		0.45	0.63	Ω
Input Capacitance	C_{iss}	$V_{DS} = -10V, f = 1MHz$		170		pF
Output Capacitance	C_{oss}	$V_{DS} = -10V, f = 1MHz$		170		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -10V, f = 1MHz$		40		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		10		ns
Rise Time	t_r	"		14		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		70		ns
Fall Time	t_f	"		40		ns
Diode Forward Voltage	V_{SD}	$I_S = -1A, V_{GS} = 0$	-0.9			V

Marking : JG

Switching Time Test Circuit



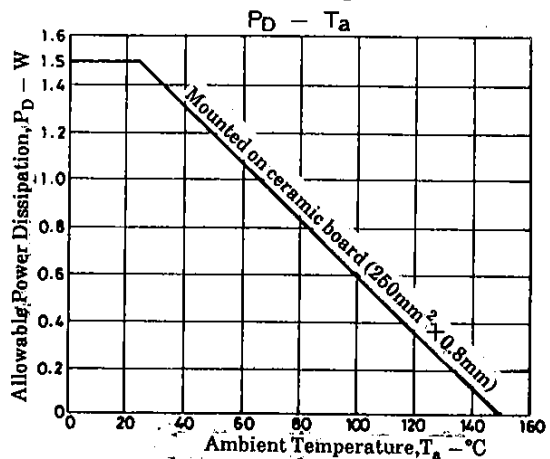
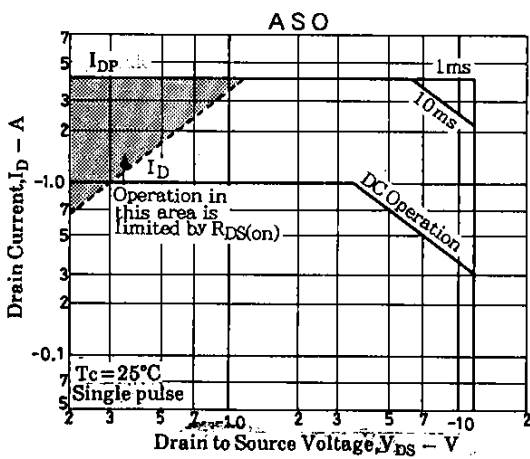
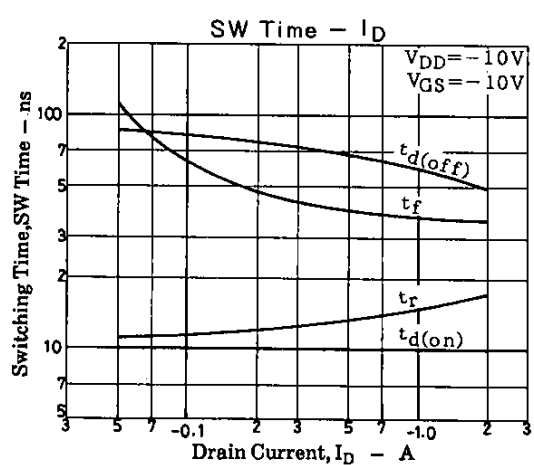
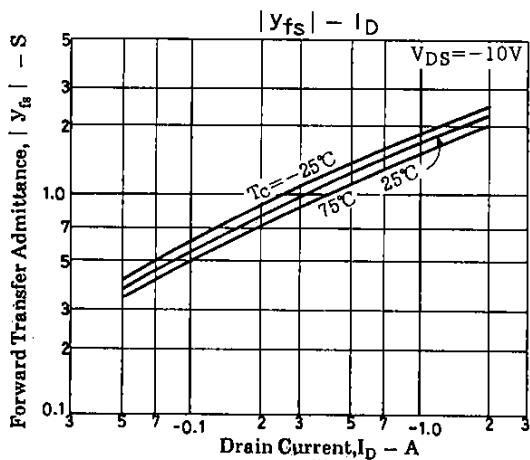
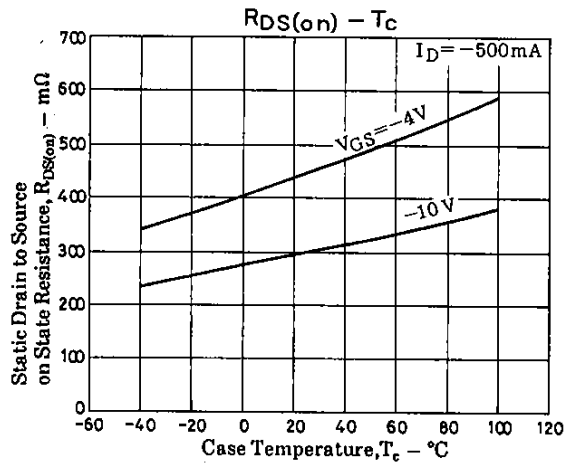
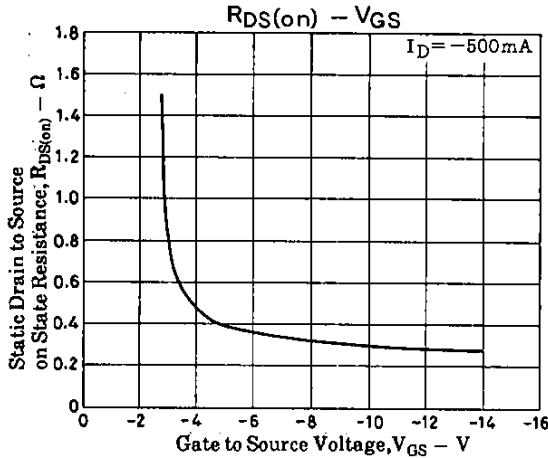
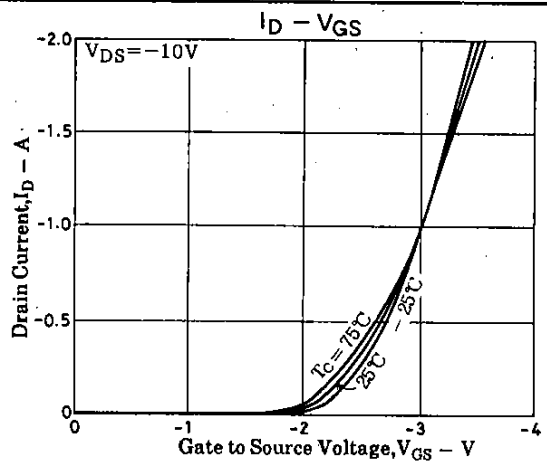
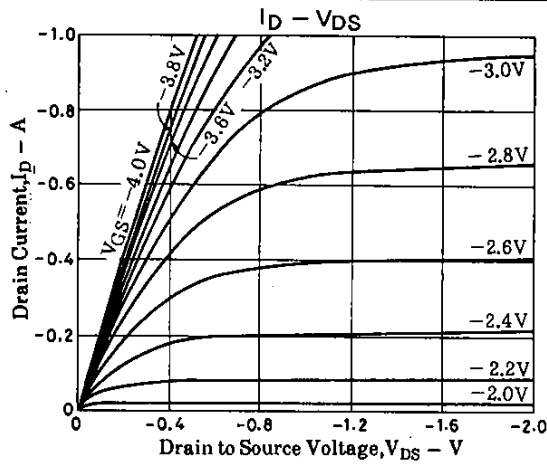
Package Dimensions 2062

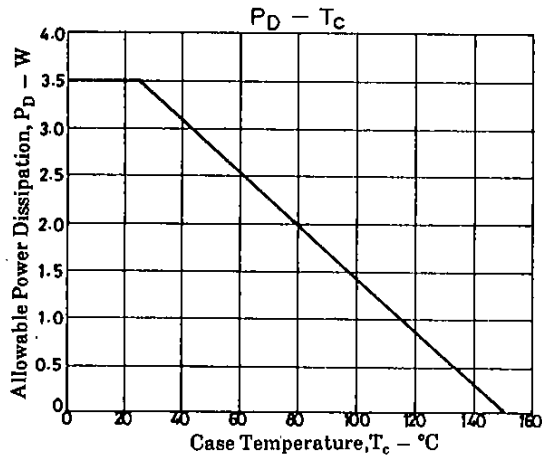


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