

SANYO

No.4317

2SJ307

P-Channel MOS Silicon FET

Very High-Speed
Switching Applications**Features**

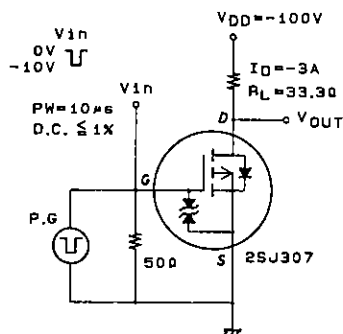
- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.
- Micaless package facilitating mounting.

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

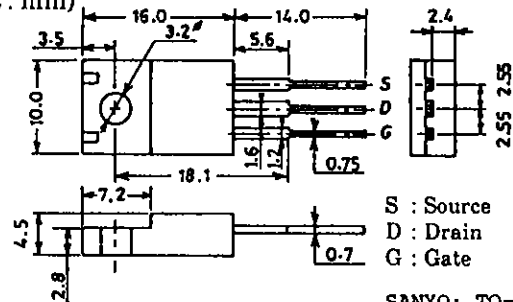
			unit
Drain to Source Voltage	V_{DS}	-250	V
Gate to Source Voltage	V_{GS}	± 30	V
Drain Current(DC)	I_D	-6	A
Drain Current(Pulse)	I_{DP}	$PW \leq 10\mu s, \text{ duty cycle} \leq 1\%$	-24 A
Allowable Power Dissipation	P_D	2.0	W
		$T_c = 25^\circ\text{C}$	30 W
Channel Temperature	T_{ch}	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -1\text{mA}, V_{GS} = 0$	-250			V
G-S Breakdown Voltage	$V_{(BR)GSS}$	$I_G = \pm 100\mu\text{A}, V_{DS} = 0$	± 30			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -250\text{V}, V_{GS} = 0$			-100	μA
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = \pm 25\text{V}, V_{DS} = 0$			± 10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = -10\text{V}, I_D = -1\text{mA}$	-1.5		-2.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = -10\text{V}, I_D = -3\text{A}$	3	5		S
Static Drain to Source on State Resistance	$R_{DS(on)}$	$I_D = -3\text{A}, V_{GS} = -10\text{V}$		0.75	1.0	Ω
Input Capacitance	C_{iss}	$V_{DS} = -20\text{V}, f = 1\text{MHz}$		1250		pF
Output Capacitance	C_{oss}	$V_{DS} = -20\text{V}, f = 1\text{MHz}$		235		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -20\text{V}, f = 1\text{MHz}$		105		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		24		ns
Rise Time	t_r	"		37		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		155		ns
Fall Time	t_f	"		130		ns
Diode Forward Voltage	V_{SD}	$I_S = -6\text{A}, V_{GS} = 0$	-1.0	-1.5		V

Switching Time Test Circuit**Package Dimensions 2063**

(unit: mm)

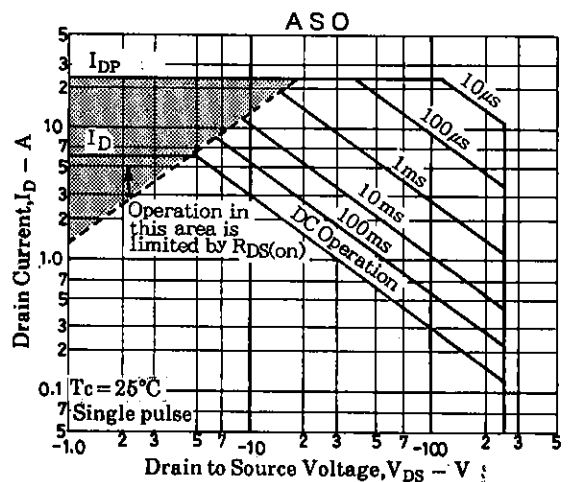
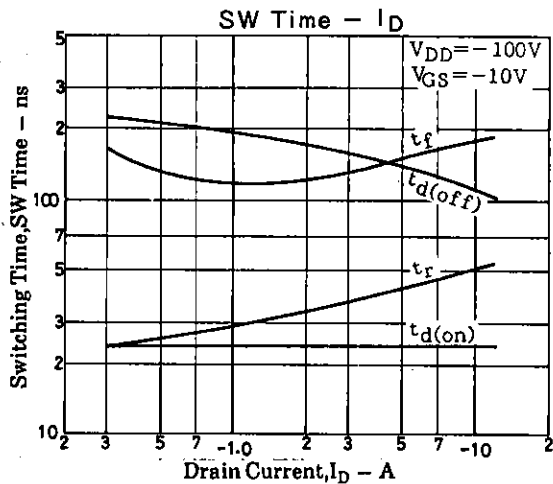
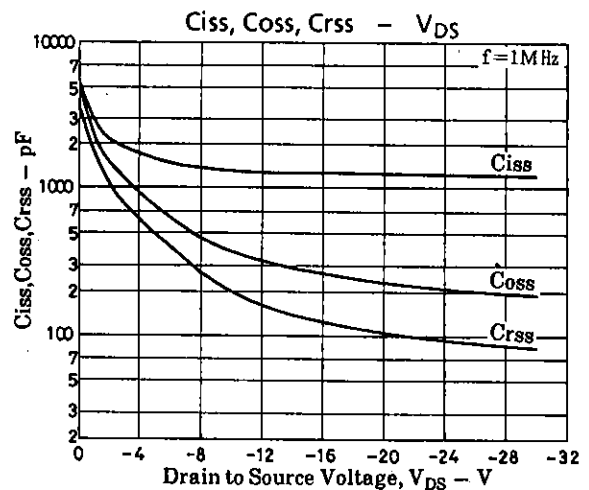
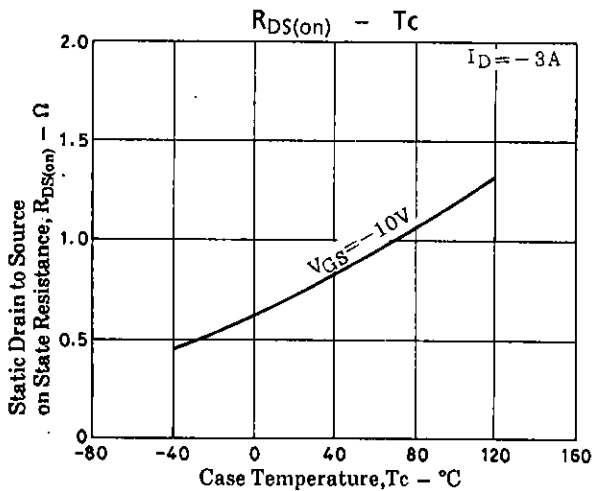
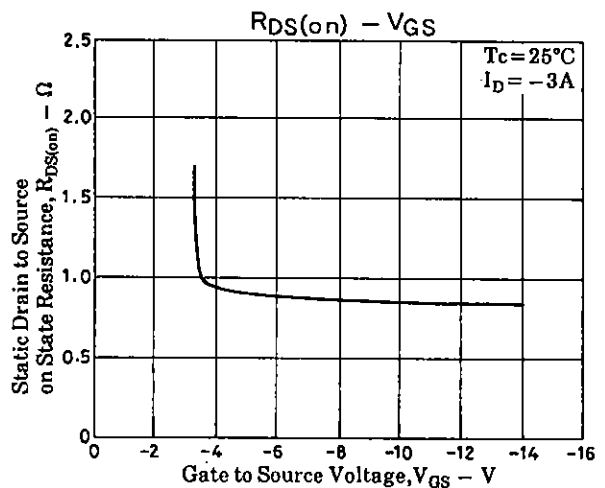
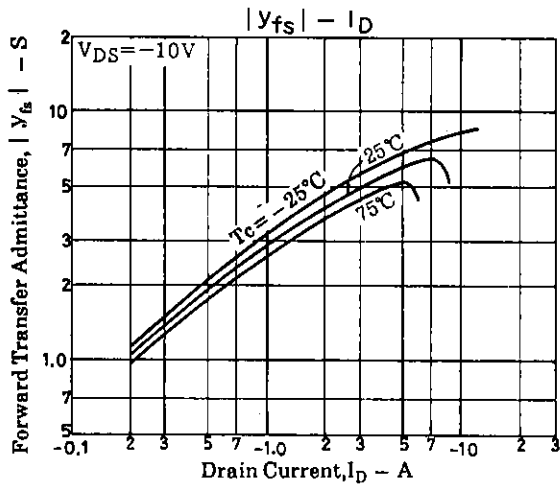
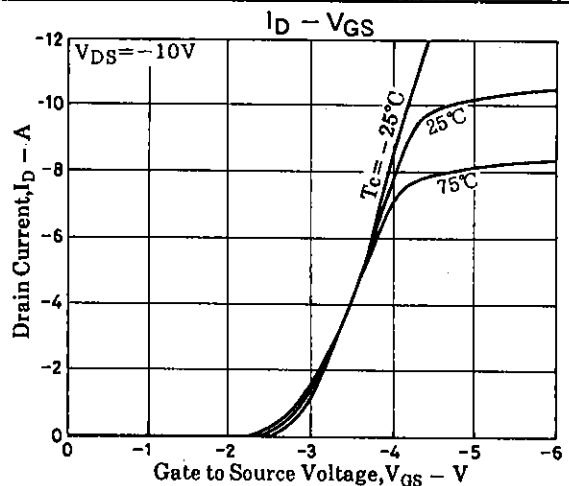
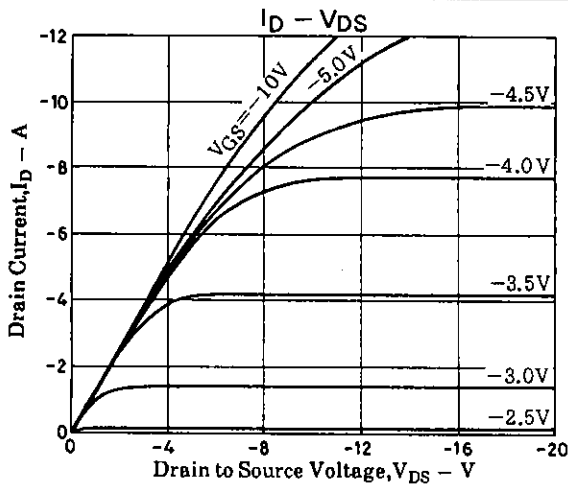
S : Source
D : Drain
G : Gate

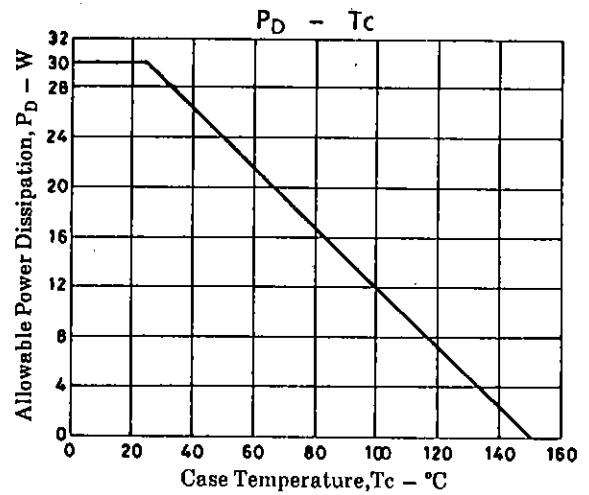
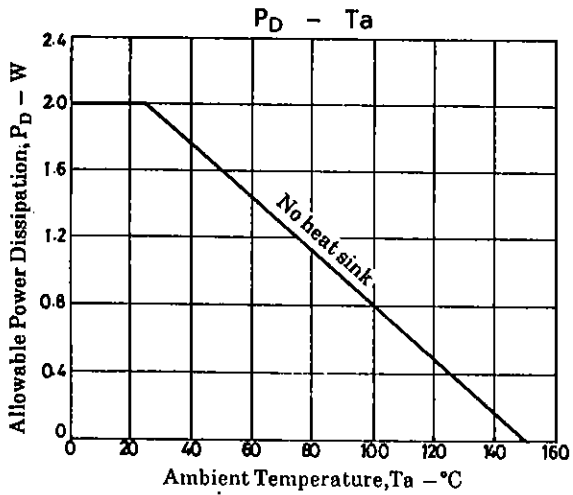
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