

SANYO

No.4749

2SJ276

P-Channel MOS Silicon FET
Very High-Speed
Switching Applications

Features

- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.
- Surface mount type device making the following possible.
 - Reduction in the assembling time for 2SJ276-applied equipment.
 - High-density surface mount applications.
 - Small size of 2SJ276-applied equipment.

Absolute Maximum Ratings at Ta = 25°C

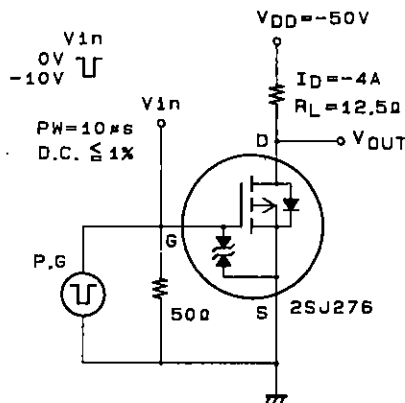
			unit
Drain-to-Source Voltage	V _{DS}	-100	V
Gate-to-Source Voltage	V _{GS}	±20	V
Drain Current (DC)	I _D	-8	A
Drain Current (Pulse)	I _{DP}	PW ≤ 10μs, duty cycle ≤ 1%	-32 A
Allowable Power Dissipation	P _D	Tc = 25°C	1.65 W
			60 W
Channel Temperature	Tch	150	°C
Storage Temperature	Tstg	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = -1mA, V _{GS} = 0	-100			V
G-S Breakdown Voltage	V _{(BR)GSS}	I _G = ±100μA, V _{DS} = 0	±20			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} = -100V, V _{GS} = 0			-100	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±16V, V _{DS} = 0			±10	μA
Gate-to-Source 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 = -4A	3.5	6.5		S
Static Drain-to-Source ON-State Resistance	R _{DS(on)}	I _D = -4A, V _{GS} = -10V		0.22	0.3	Ω
	R _{DS(on)}	I _D = -4A, V _{GS} = -4V		0.3	0.4	Ω

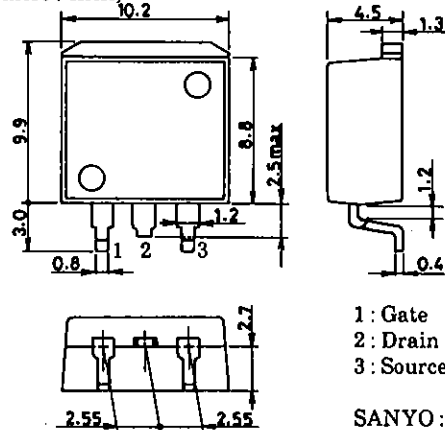
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Switching Time Test Circuit



Package Dimensions 2090A

(unit: mm)

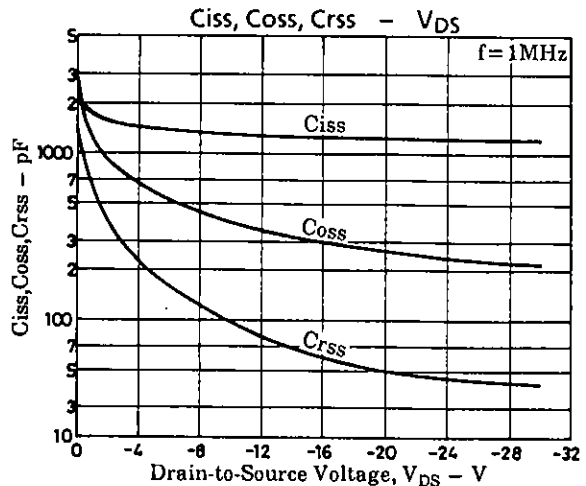
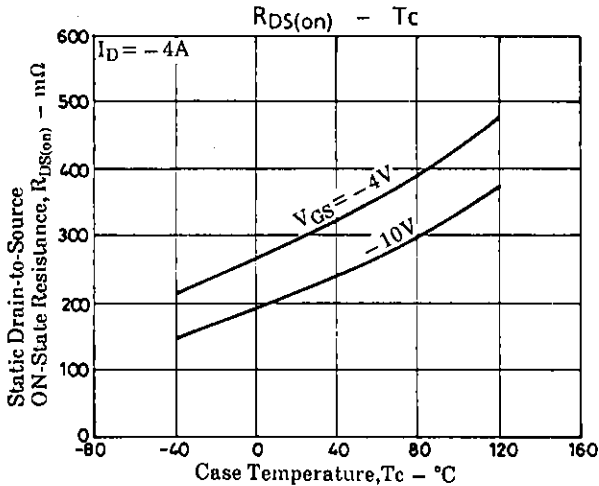
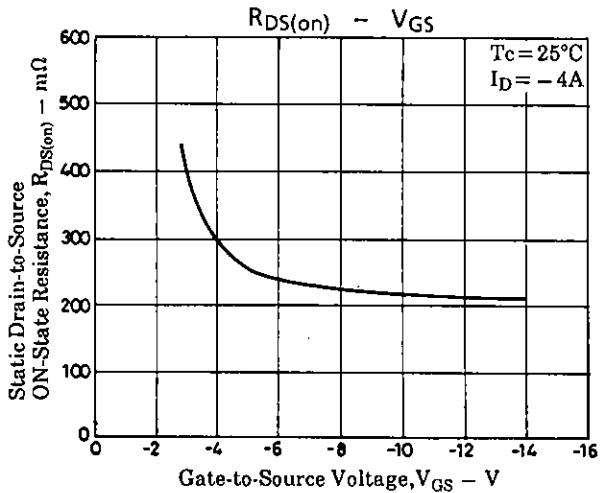
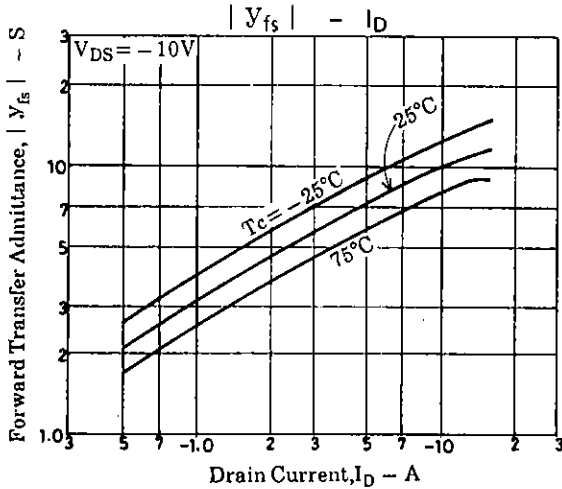
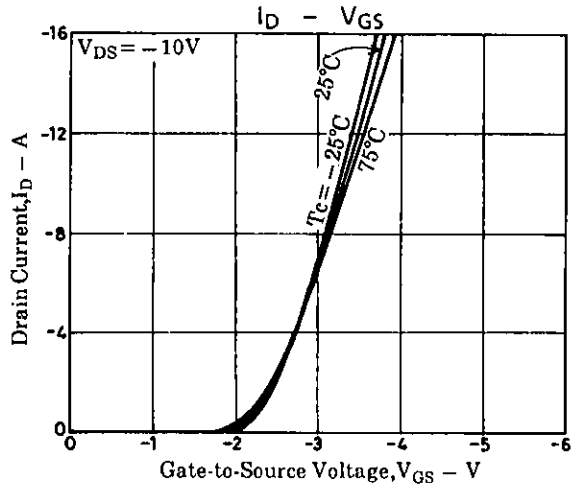
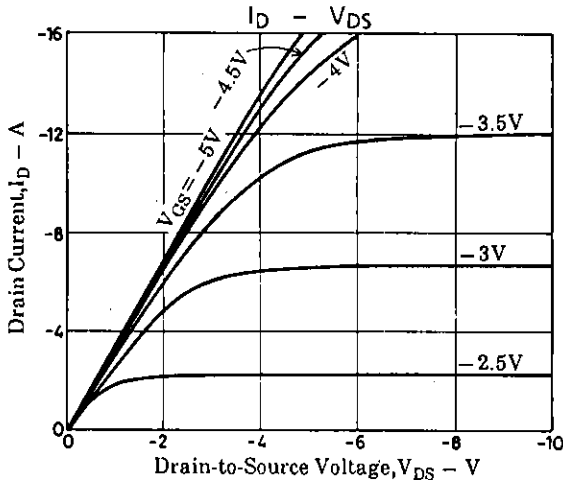


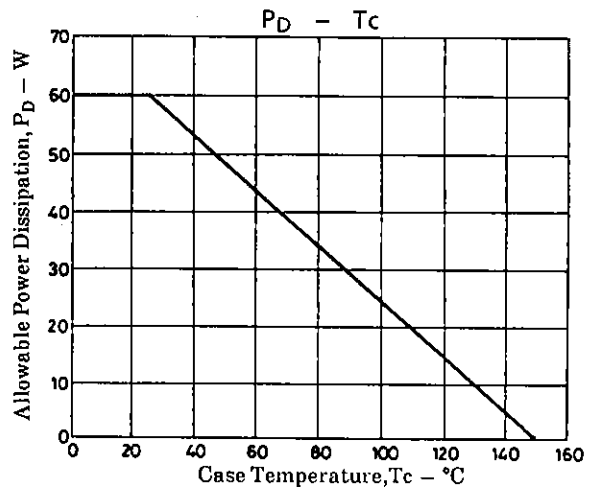
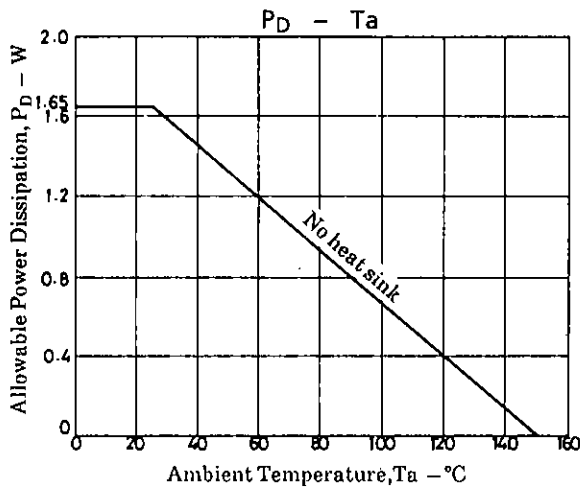
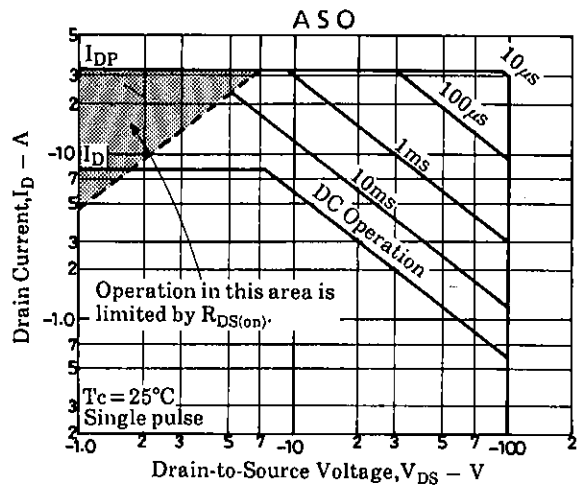
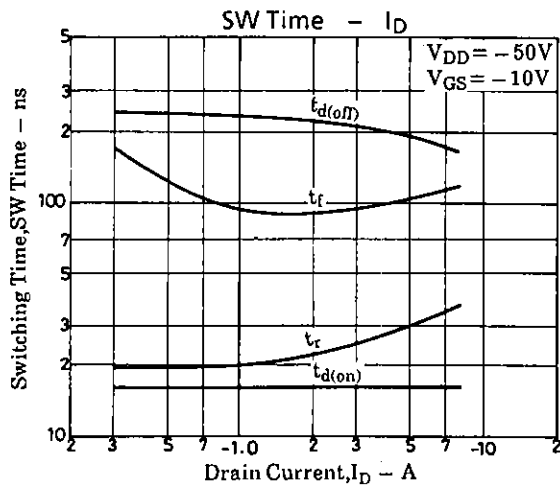
- 1: Gate
- 2: Drain
- 3: Source

SANYO: SMP-FD

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			min	typ	max	unit
Input Capacitance	C_{iss}	$V_{DS} = -20V, f = 1MHz$		1230		pF
Output Capacitance	C_{oss}	$V_{DS} = -20V, f = 1MHz$		260		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -20V, f = 1MHz$		50		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		16		ns
Rise Time	t_r	"		27		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		200		ns
Fall Time	t_f	"		100		ns
Diode Forward Voltage	V_{SD}	$I_S = -8A, V_{GS} = 0$	-1.0	-1.5		V





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