

**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**

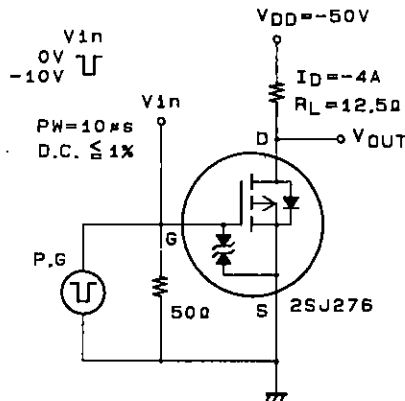
			unit
Drain-to-Source Voltage	V <sub>DS</sub>	-100	V
Gate-to-Source Voltage	V <sub>GS</sub>	±20	V
Drain Current (DC)	I <sub>D</sub>	-8	A
Drain Current (Pulse)	I <sub>DP</sub>	PW ≤ 10μs, duty cycle ≤ 1%	-32 A
Allowable Power Dissipation	P <sub>D</sub>	1.65	W
		Tc = 25°C	60 W
Channel Temperature	Tch	150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

**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = -1mA, V <sub>GS</sub> = 0	-100			V
G-S Breakdown Voltage	V <sub>(BR)GSS</sub>	I <sub>G</sub> = ±100μA, V <sub>DS</sub> = 0	±20			V
Zero-Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = -100V, V <sub>GS</sub> = 0			-100	μA
Gate-to-Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> = ±16V, V <sub>DS</sub> = 0			±10	μA
Gate-to-Source Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> = -10V, I <sub>D</sub> = -1mA	-1.0		-2.0	V
Forward Transfer Admittance	Y <sub>fs</sub>	V <sub>DS</sub> = -10V, I <sub>D</sub> = -4A	3.5	6.5		S
Static Drain-to-Source ON-State Resistance	R <sub>DS(on)</sub>	I <sub>D</sub> = -4A, V <sub>GS</sub> = -10V		0.22	0.3	Ω
		I <sub>D</sub> = -4A, V <sub>GS</sub> = -4V		0.3	0.4	Ω

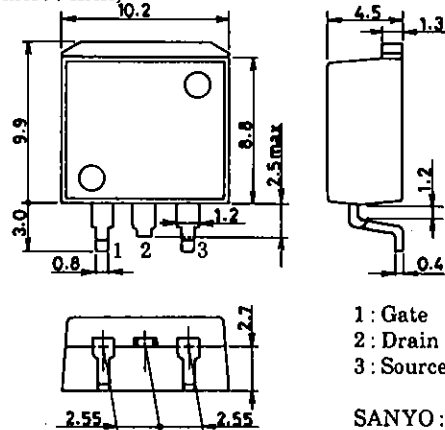
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**Switching Time Test Circuit**



**Package Dimensions 2090A**

(unit: mm)

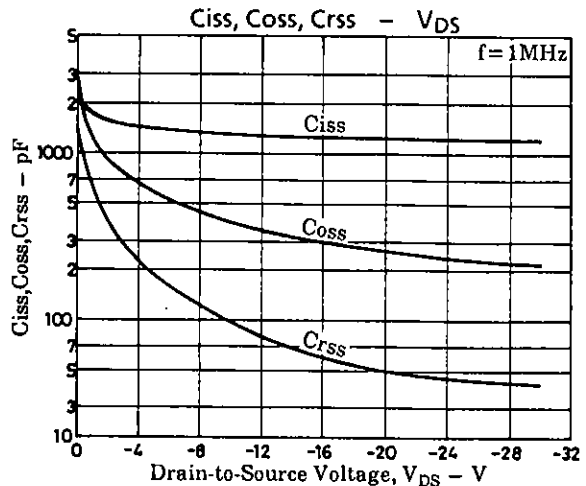
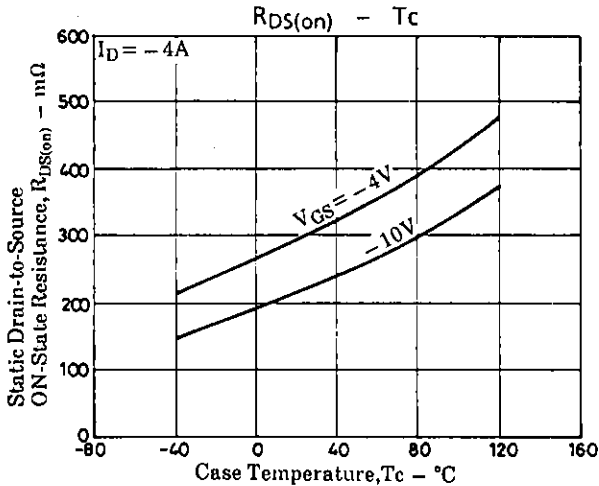
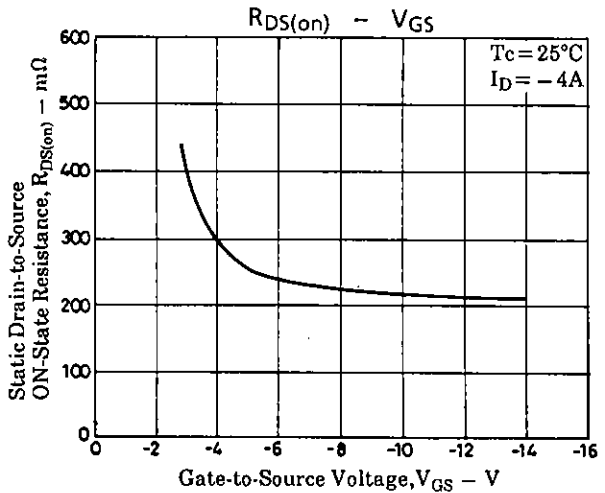
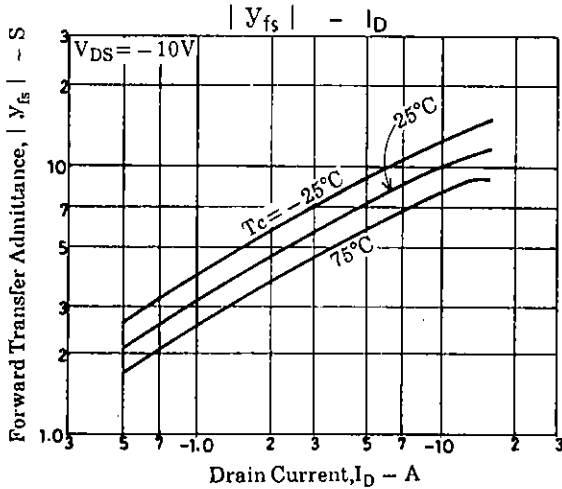
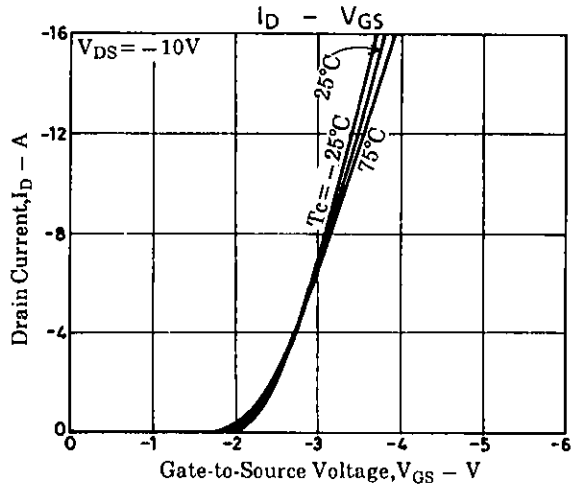
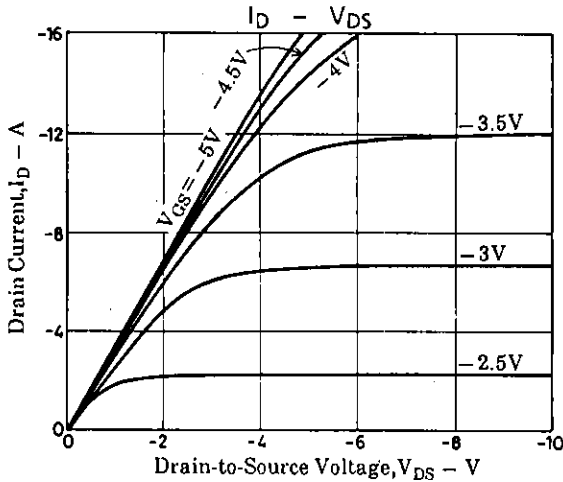


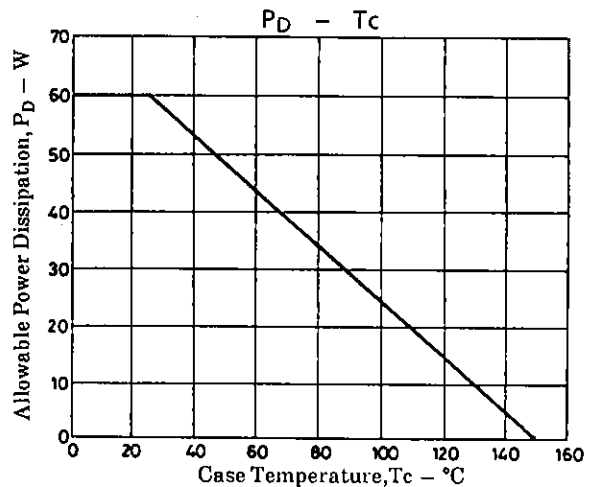
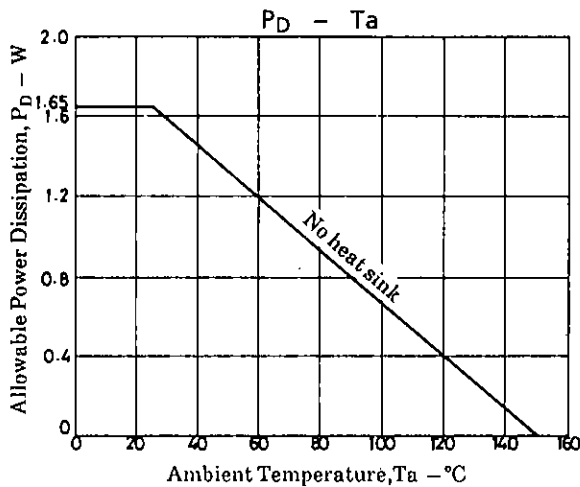
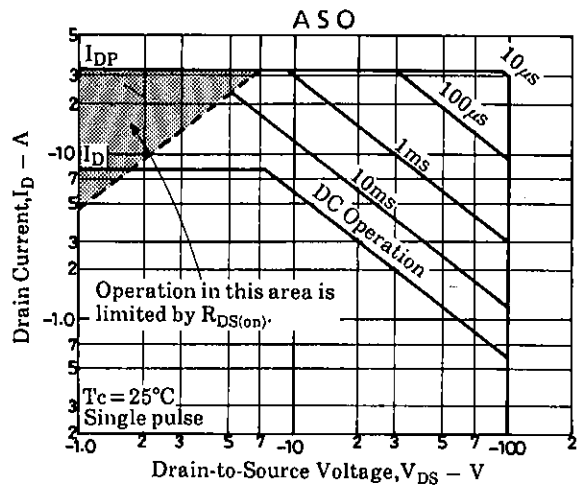
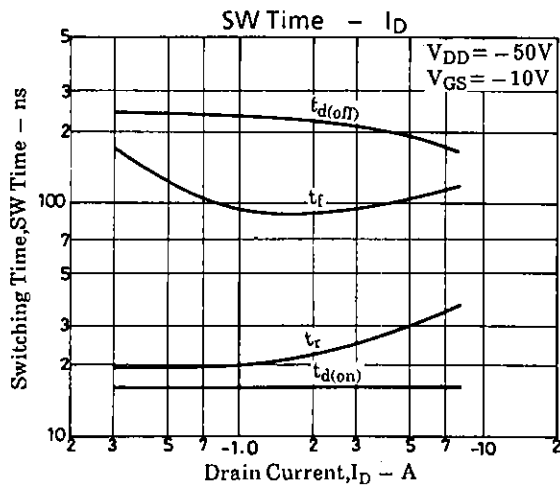
- 1: Gate
- 2: Drain
- 3: Source

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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