



No.4221

**2SJ285**

P-Channel MOS Silicon FET

Very High-Speed  
Switching Applications**Features**

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

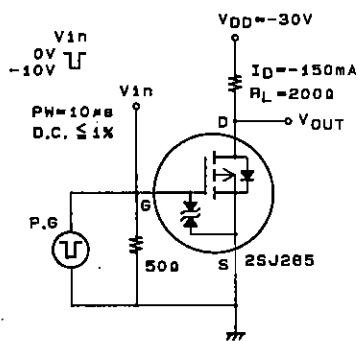
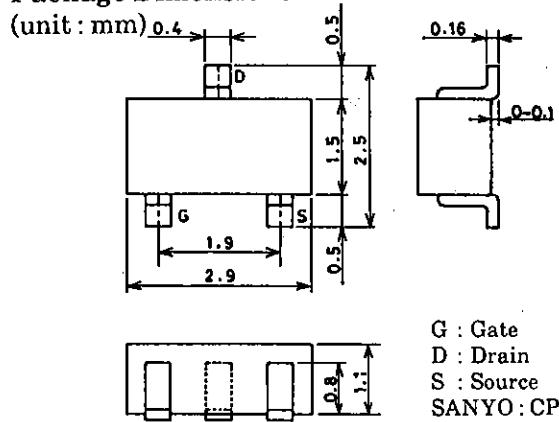
**Absolute Maximum Ratings at Ta = 25°C**

		unit
Drain to Source Voltage	V <sub>DSS</sub>	-60 V
Gate to Source Voltage	V <sub>GSS</sub>	±15 V
Drain Current(DC)	I <sub>D</sub>	-250 mA
Drain Current(Pulse)	I <sub>DP</sub>	PW ≤ 10μs, duty cycle ≤ 1% -1 A
Allowable Power Dissipation	P <sub>D</sub>	250 mW
Channel Temperature	T <sub>ch</sub>	150 °C
Storage Temperature	T <sub>stg</sub>	-55 to +150 °C

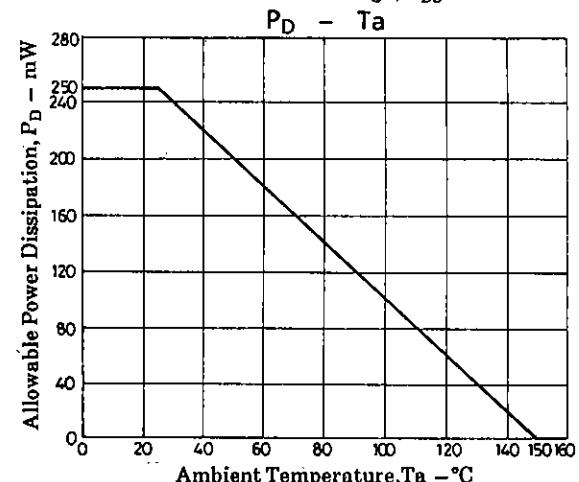
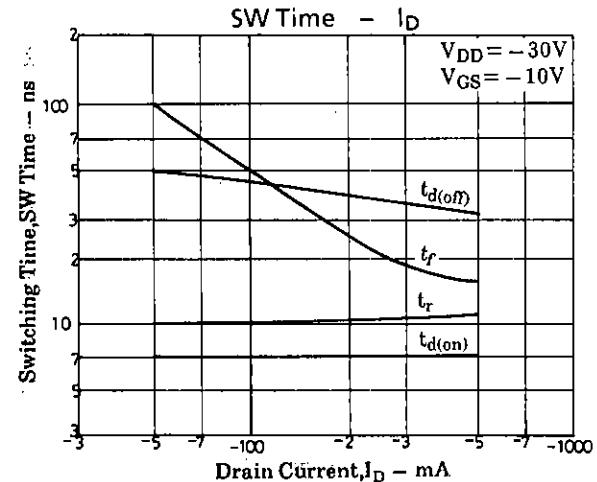
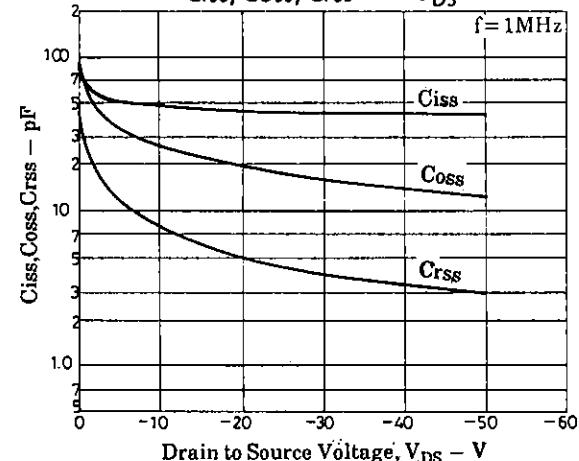
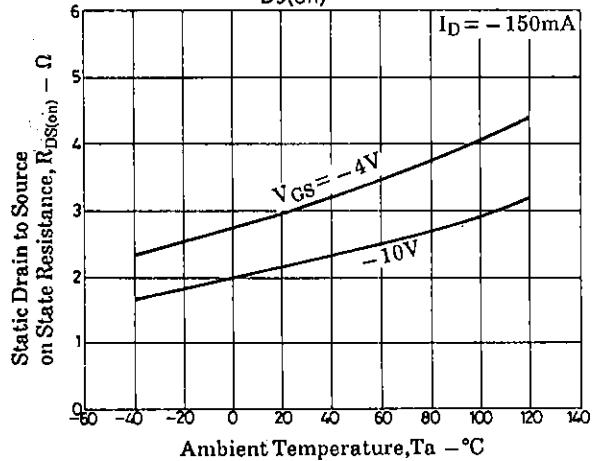
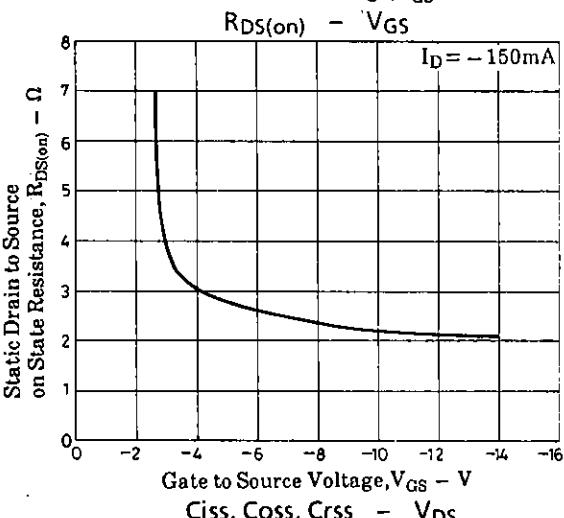
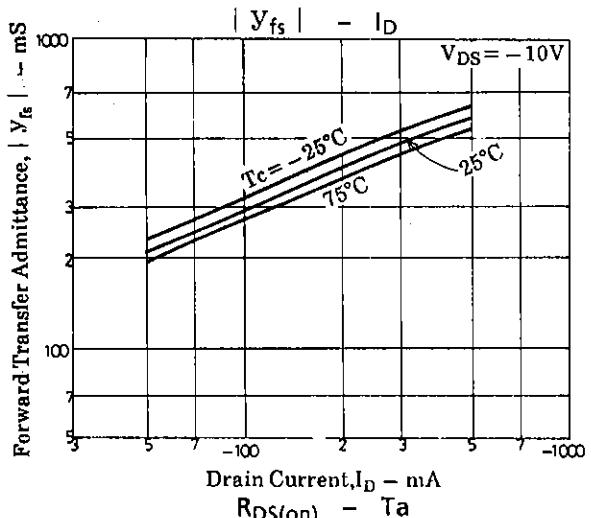
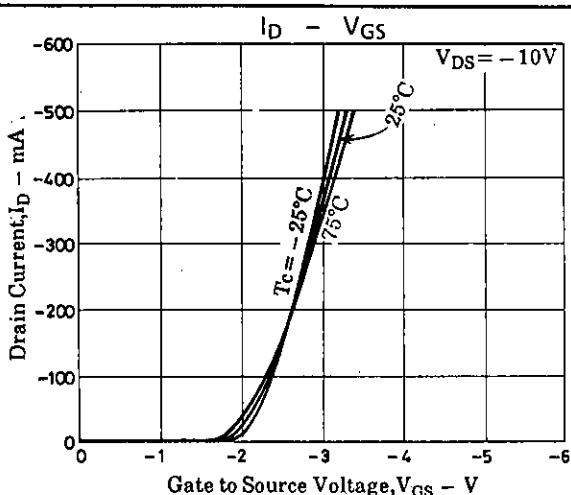
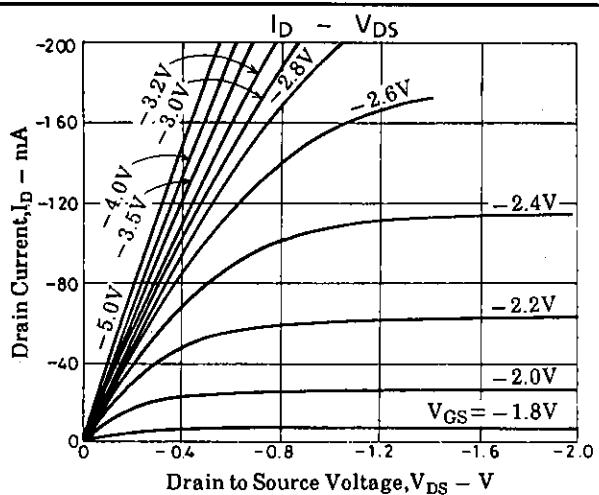
**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = -1mA, V <sub>GS</sub> = 0	-60			V
Zero Gate Voltage	I <sub>DSS</sub>	V <sub>DS</sub> = -60V, V <sub>GS</sub> = 0			-100	μA
Drain Current						
Gate to Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> = ±12V, V <sub>DS</sub> = 0			±10	μA
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> = -150mA	200	350		mS
Static Drain to Source on State Resistance	R <sub>D(on)</sub>	I <sub>D</sub> = -150mA, V <sub>GS</sub> = -10V		2.2	3.0	Ω
Input Capacitance	C <sub>iss</sub>	R <sub>D(on)</sub> I <sub>D</sub> = -150mA, V <sub>GS</sub> = -4V		3.0	4.0	Ω
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = -20V, f = 1MHz		45		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = -20V, f = 1MHz		20		pF
Turn-ON Delay Time	t <sub>d(on)</sub>	V <sub>DS</sub> = -20V, f = 1MHz		5		pF
Rise Time	t <sub>r</sub>	See specified Test Circuit.		7		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	"		10		ns
Fall Time	t <sub>f</sub>	"		40		ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = -250mA, V <sub>GS</sub> = 0		35		ns
				-1		V

Marking : BM

**Switching Time Test Circuit****Package Dimensions 2091****SANYO Electric Co., Ltd. Semiconductor Business Headquarters**

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