

No.3766

**2SJ193**

P-Channel MOS Silicon FET

Very High-Speed

Switching Applications

**SANYO****Features**

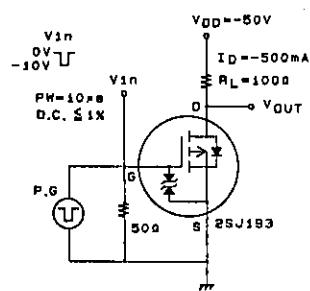
- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.

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

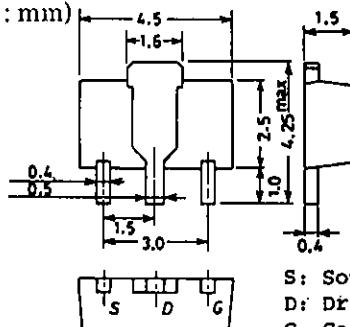
Drain to Source Voltage	V <sub>DSS</sub>	-100	V
Gate to Source Voltage	V <sub>GSS</sub>	±15	V
Drain Current(DC)	I <sub>D</sub>	-1	A
Drain Current(Pulse)	I <sub>DP</sub>	PW≤10μs, duty cycle≤1% -4	A
Allowable Power Dissipation	P <sub>D</sub>	T <sub>c</sub> =25°C 3.5	W
		Mounted on ceramic board (250mm <sup>2</sup> ×0.8mm)	1.5
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>tsg</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	-100			V
Zero Gate Voltage	I <sub>DSS</sub>	V <sub>DS</sub> = -100V, 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	V <sub>fs</sub>	V <sub>DS</sub> = -10V, I <sub>D</sub> = -500mA	0.6	1.0		S
Static Drain to Source	R <sub>DSS(on)</sub>	I <sub>D</sub> = -500mA, V <sub>GS</sub> = -10V		1.8	2.4	Ω
on State Resistance	R <sub>DSS(on)</sub>	I <sub>D</sub> = -500mA, V <sub>GS</sub> = -4V		2.4	3.5	Ω
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = -20V, f=1MHz	160			pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = -20V, f=1MHz	40			pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = -20V, f=1MHz	6			pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See specified Test Circuit	10			ns
Rise Time	t <sub>r</sub>	"	13			ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	"	70			ns
Fall Time	t <sub>f</sub>	"	30			ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = -1A, V <sub>GS</sub> =0			-0.9	V

**Switching Time Test Circuit****Package Dimensions 2062**

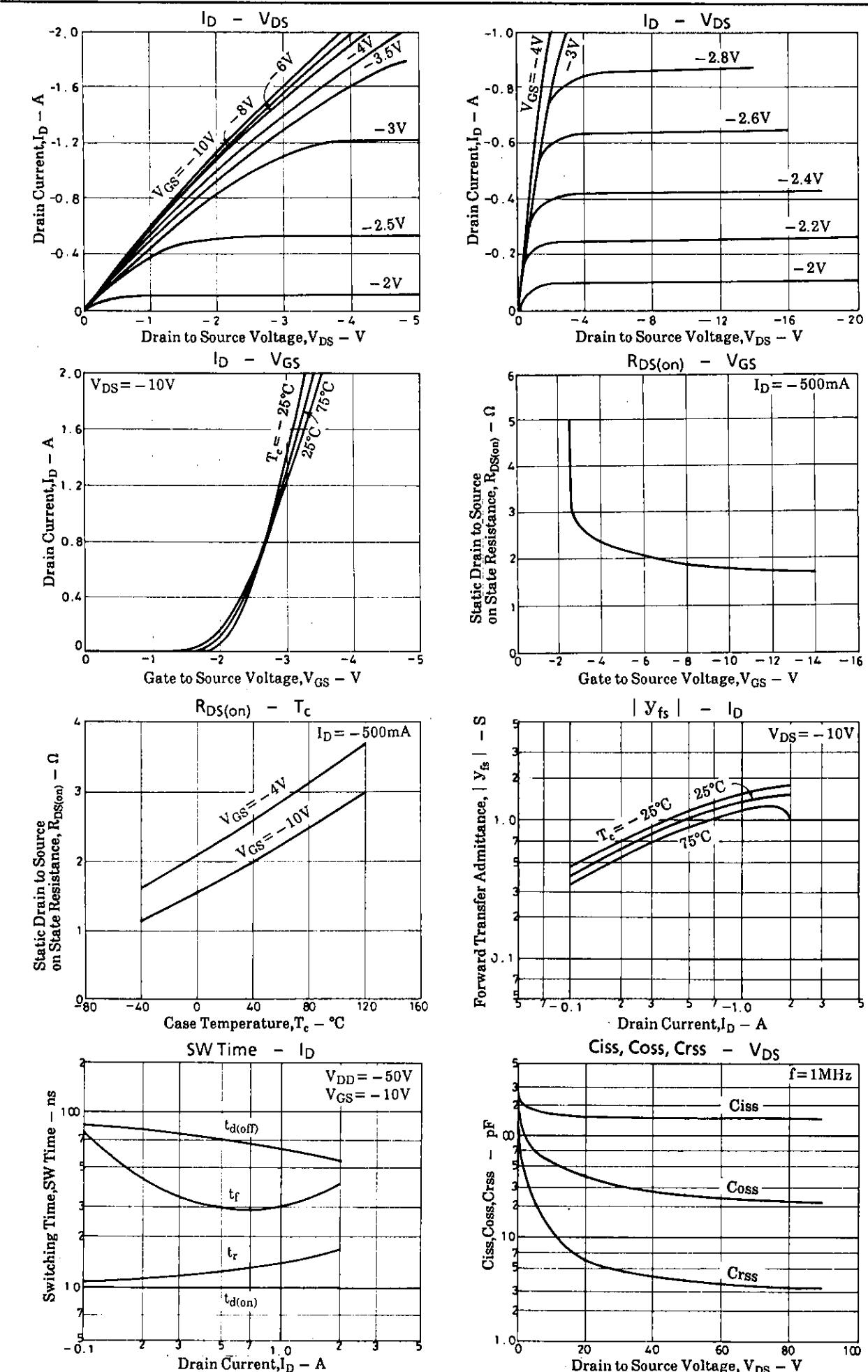
(unit : mm)

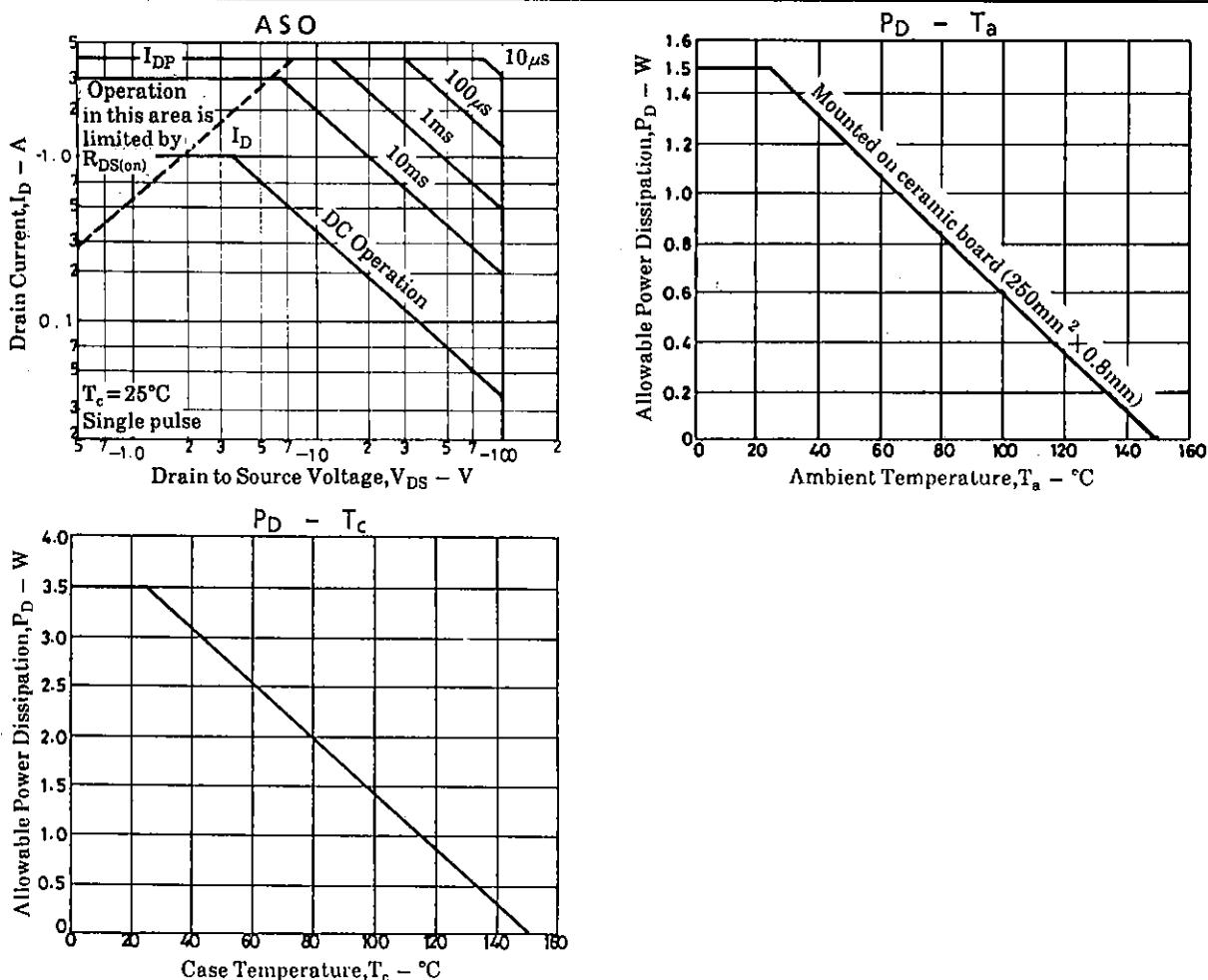


S: Source  
D: Drain  
G: Gate

SANYO: PCP

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