

<b>SANYO</b>	No.3763	<b>2SJ190</b>
		P-Channel MOS Silicon FET
<b>Very High-Speed Switching Applications</b>		

**Features**

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

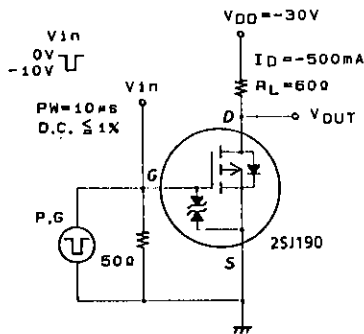
**Absolute Maximum Ratings at Ta = 25°C**

Drain to Source Voltage	$V_{DSS}$		-60	V	unit
Gate to Source Voltage	$V_{GSS}$		±15	V	
Drain Current (DC)	$I_D$		-1	A	
Drain Current (Pulse)	$I_{DP}$	PW ≤ 10μs, duty cycle ≤ 1% (Tc = 25°C Mounted on ceramic board (250mm <sup>2</sup> × 0.8mm))	-4	A	
Allowable Power Dissipation	$P_D$		3.5	W	
Channel Temperature	$T_{ch}$		150	°C	
Storage Temperature	$T_{stg}$		-55 to +150	°C	

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

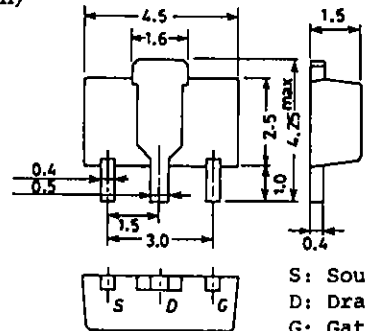
			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -1mA, V_{GS} = 0$	-60			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = -60V, V_{GS} = 0$			-100	μA
Gate to Source Leakage Current	$I_{GSS}$	$V_{GS} = ±12V, V_{DS} = 0$			±10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = -10V, I_D = -1mA$	-1.0		-2.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = -10V, I_D = -500mA$	0.6	1.0		S
Static Drain to Source on State Resistance	$R_{DS(on)}$	$I_D = -500mA, V_{GS} = -10V$		0.9	1.2	Ω
	$R_{DS(on)}$	$I_D = -500mA, V_{GS} = -4V$		1.2	1.6	Ω
Input Capacitance	$C_{iss}$	$V_{DS} = -20V, f = 1MHz$		160		pF
Output Capacitance	$C_{oss}$	$V_{DS} = -20V, f = 1MHz$		60		pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS} = -20V, f = 1MHz$		10		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		10		ns
Rise Time	$t_r$	∕		13		ns
Turn-OFF Delay Time	$t_{d(off)}$	∕		70		ns
Fall Time	$t_f$	∕		30		ns
Diode Forward Voltage	$V_{SD}$	$I_S = -1A, V_{GS} = 0$		-0.9		V

**Switching Time Test Circuit**



**Package Dimensions 2062**

(unit: mm)

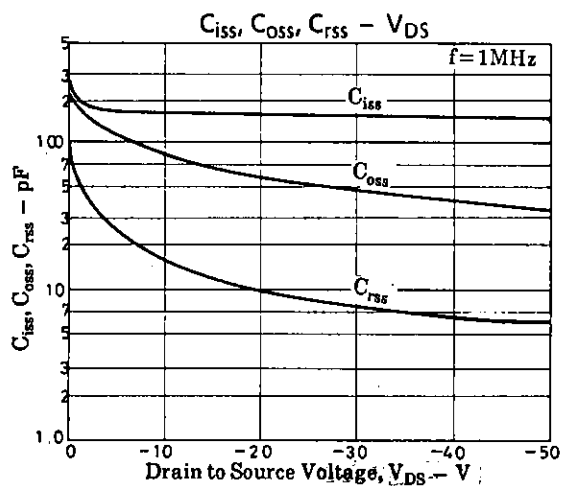
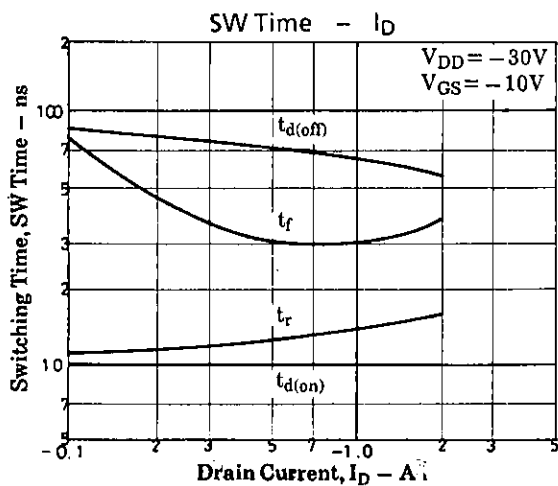
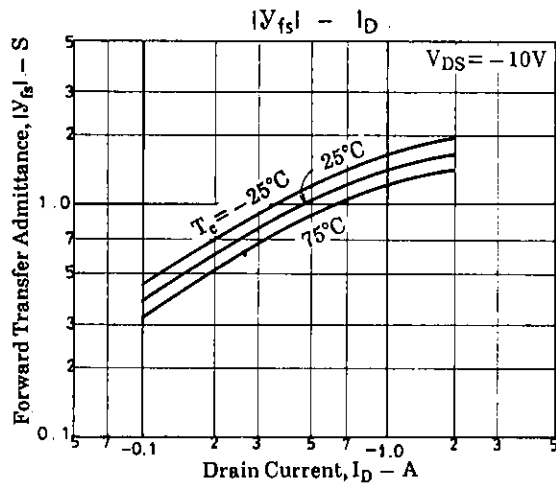
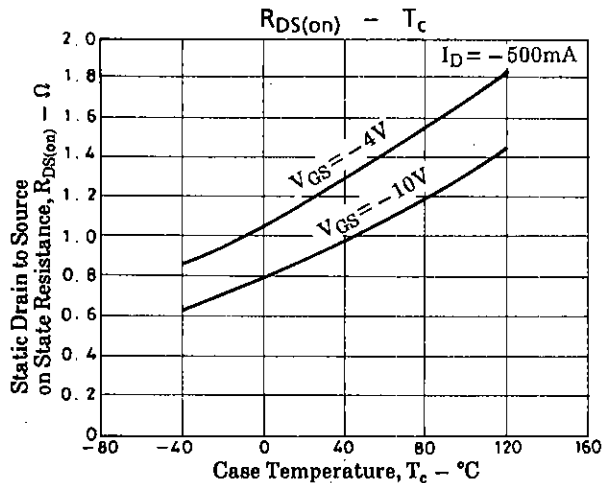
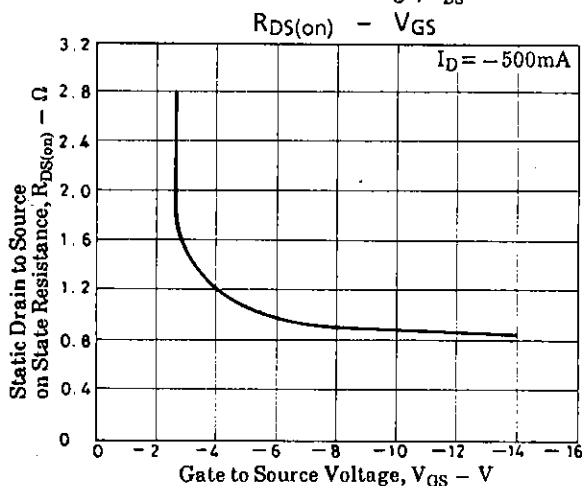
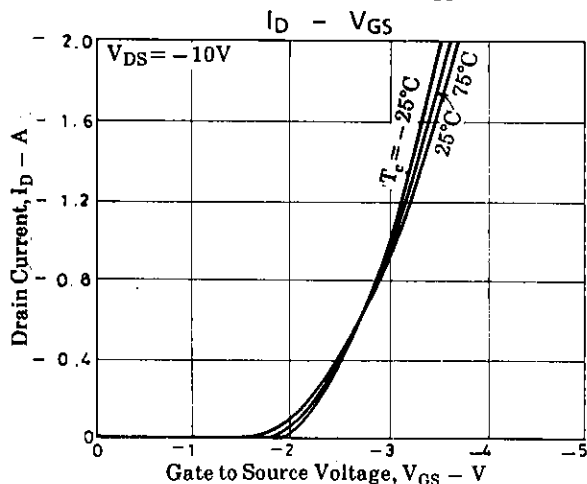
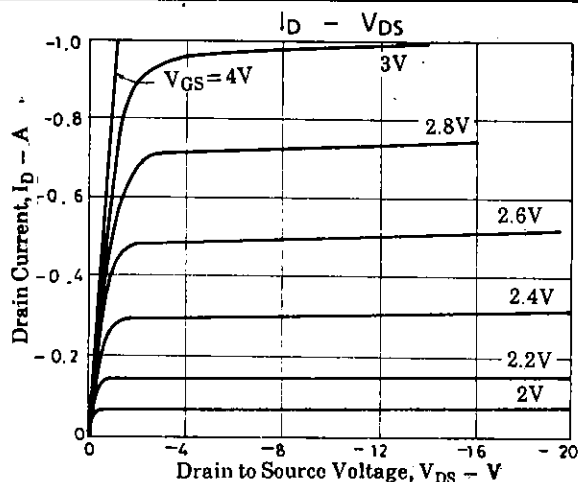
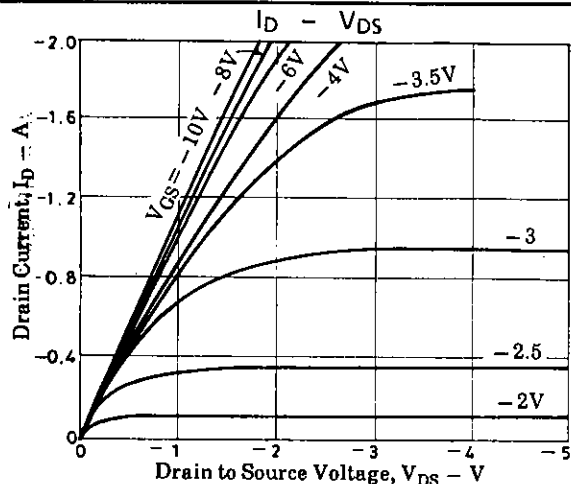


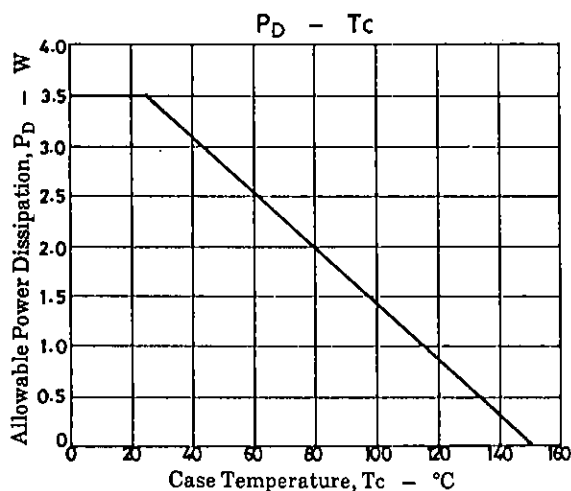
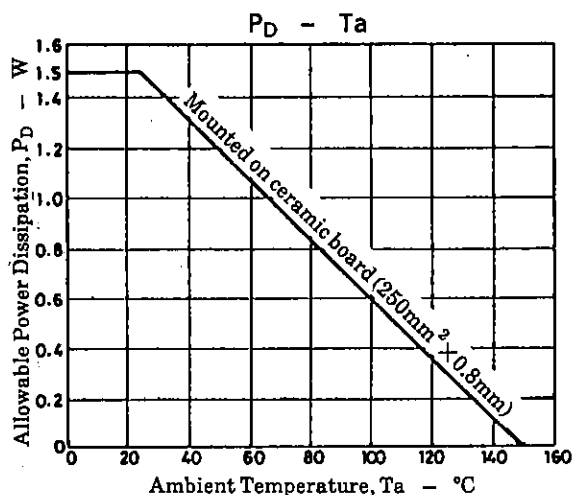
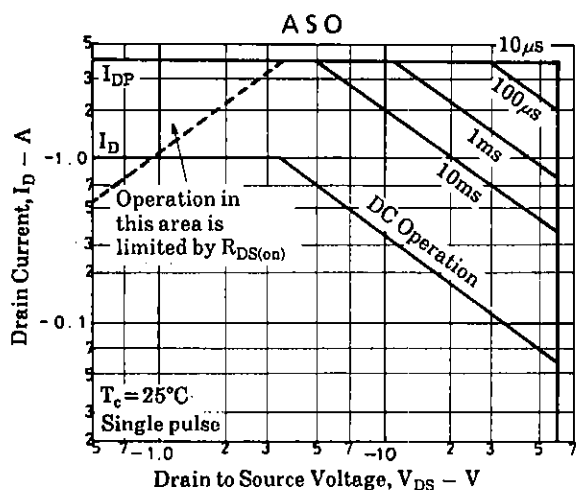
S: Source  
D: Drain  
G: Gate

SANYO: PCP

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