

No.4220

2SJ284
P-Channel MOS Silicon FET

Very High-Speed Switching Applications

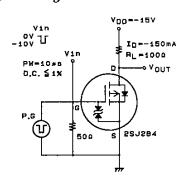
Features

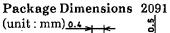
- · Low ON resistance.
- · Very high-speed switching.
- · Low-voltage drive.

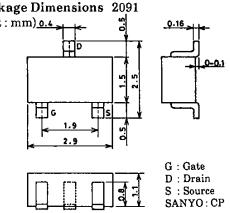
Absolute Maximum Ratings at Ta = 25°C				unit		
Drain to Source Voltage	$V_{\rm DSS}$		_	- 30	V	
Gate to Source Voltage	V _{GSS}		=	t 15	V	
Drain Current(DC)	ID		_	300	mΑ	
Drain Current(Pulse)	I_{DP}	$PW \le 10 \mu s$, duty cycle $\le 1\%$		1.2	Α	
Allowable Power Dissipation	$\tilde{P_D}$			250	mW	
Channel Temperature	Tch			150	$^{\circ}\mathrm{C}$	
Storage Temperature	Tstg		-55 to +	150	°C	
Electrical Characteristics at Ta =			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -1 \text{mA}, V_{GS} = 0$	 3 0			V
∫Zero Gate Voltage	I_{DSS}	$V_{DS} = -30V, V_{GS} = 0$			-100	μA
l Drain Current						
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = \pm 12V, V_{DS} = 0$			± 10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = -10V, I_{D} = -1mA$	-1.0		-2.0	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = -10V, I_D = -150mA$	200	350		mS
Static Drain to Source	$R_{DS(on)}$	$I_D = -150 \text{mA}, V_{GS} = -10 \text{V}$		1.5	2.2	Ω
on State Resistance	$R_{DS(on)}$	$I_D = -150 \text{mA}, V_{GS} = -4 \text{V}$		2.2	3.3	Ω
Input Capacitance	Ciss	$V_{DS} = -10V$, $f = 1MHz$		50		рF
Output Capacitance	Coss	$V_{DS} = -10V$, $f = 1MHz$		35		pF
Reverse Transfer Capacitance	Crss	$V_{DS} = -10V$, $f = 1MHz$		10		рF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		7		ns
Rise Time	tr	"		10		ns
Turn-OFF Delay Time	$t_{d(off)}$	4		40		ns
Fall Time	tf	"		30		ns
Diode Forward Voltage	v_{sd}	$I_S = -300 \text{mA}, V_{GS} = 0$		-1		V

Marking: AM

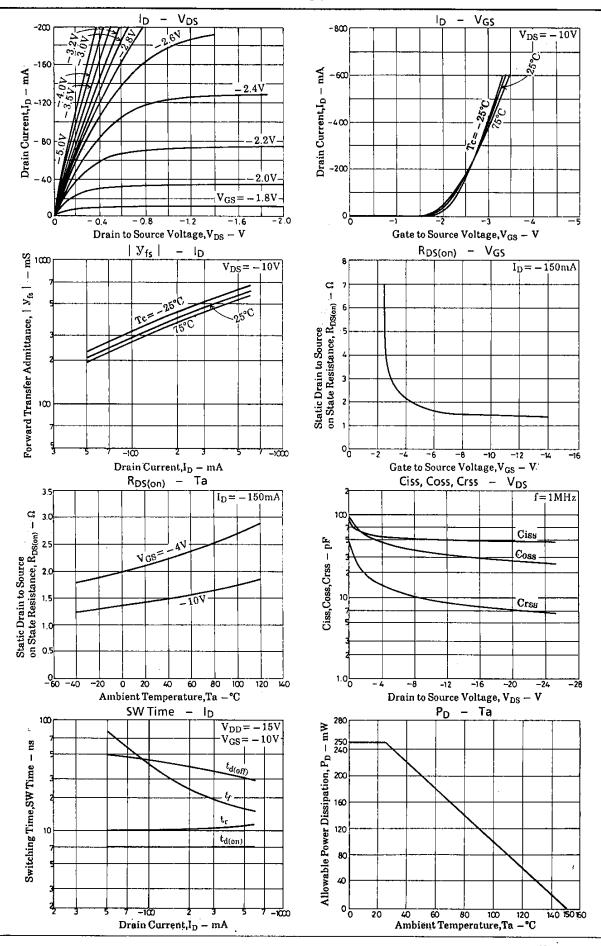
Switching Time Test Circuit







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