

No.3818

2SJ233

P-Channel MOS Silicon FET

Very High-Speed

Switching Applications

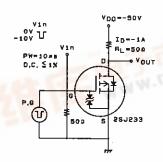
Features

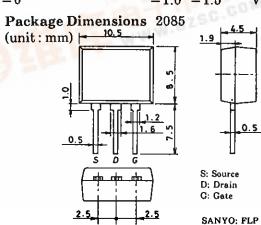
- · Low ON resistance.
- · Very high-speed switching.
- · Low-voltage drive.
- · Its height onboard is 9.5mm.
- · Meets radial taping.

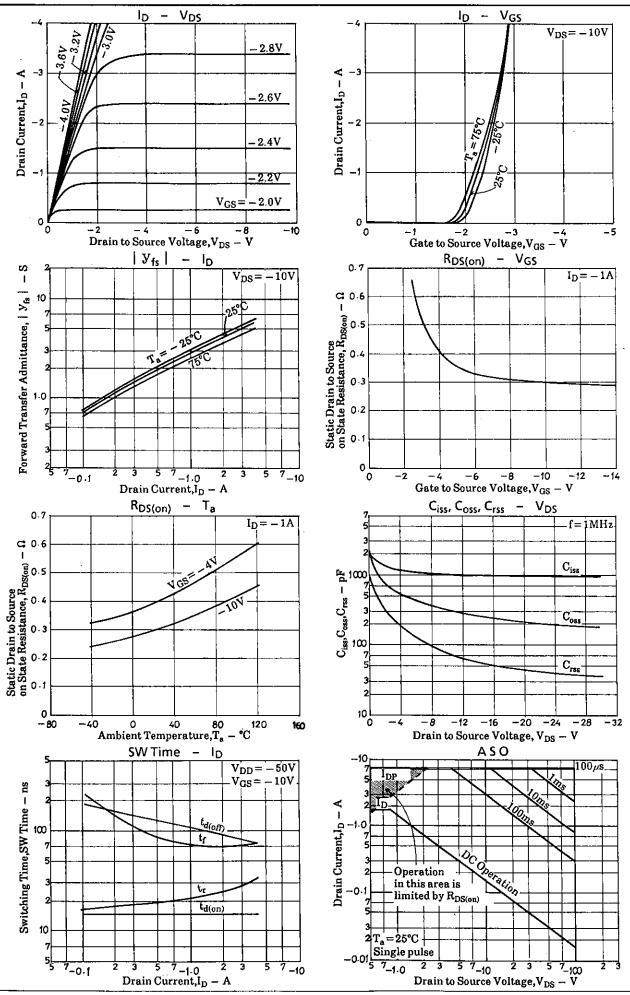
Absolute Maximum Ratings at		unit		
Drain to Source Voltage	$ m V_{DSS}$		-100	V
Gate to Source Voltage	V_{GSS}		±15	V
Drain Current(DC)	$I_{\mathbf{D}}$		-1.8	A
Drain Current(Pulse)	I_{DP}	PW≤10µs, duty cycle≤1%	-7.2	Α
Allowable Power Dissipation	$P_{\mathbf{D}}$	- min (F	1.5	W
Channel Temperature	Tch		150	$^{\circ}\mathrm{C}$
Storage Temperature	Tstg		-55 to +150	$^{\circ}\mathrm{C}$
Electrical Characteristics at To	=25°C		min tyn	may

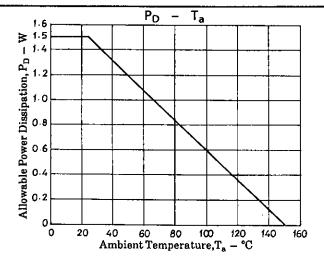
Electrical Characteristics at Ta=	25°C		min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	$I_D = -1 \text{mA,V}_{GS} = 0$	-100	• 1		V
G-S Breakdown Voltage		$I_{G} = \pm 100 \mu A, V_{DS} = 0$	±15			V
Zero Gate Voltage	I_{DSS}	$V_{DS} = -100V, V_{GS} = 0$			-100	μ A
Drain Current						
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = \pm 12V, V_{DS} = 0$			±10	μ A
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = -10V, I_D = -1mA$	-1.0		-2.0	V
Forward Transfer Admittance	$ \mathbf{y_{fs}} $	$V_{DS} = -10V, I_D = -1A$	1.8	2.8		S
Static Drain to Source	$R_{DS(on)}$	$I_D = -1A, V_{GS} = -10V$		0.3	0.4	Ω
on State Resistance	$R_{DS(on)}$	$I_D = -1A, V_{GS} = -4V$		0.4	0.55	Ω
Input Capacitance	Ciss	$V_{DS} = -20V, f = 1MHz$		950		· pF
Output Capacitance	Coss	$V_{DS} = -20V_{f} = 1MHz$		200		рF
Reverse Transfer Capacitance	Crss	$V_{DS} = -20V, f = 1MHz$		40		рF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		15		ns
Rise Time	t_r	"		22		ns
Turn-OFF Delay Time	${ m t_{d(off)}}$	"		110		ns
Fall Time	$\mathbf{t_f}$	"		70		ns
Diode Forward Voltage	V_{SD}	$I_S = -1.8 \text{ A,V}_{GS} = 0$	10	-1.0	-1.5	V

Switching Time Test Circuit









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