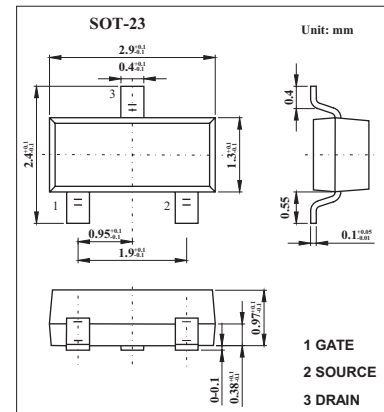
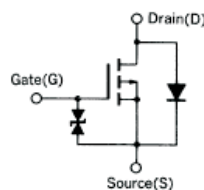


MOS Fied Effect Transistor

2SJ185

■ Features

- Directly driven by lcs having a 3V poer supply.
- Not necessary to consider driving current because of its high input impedance.
- Possible to reduce the number of parts by omitting the bias resistor



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain to source voltage $V_{GS}=0$	V_{DS}	-50	V
Gate to source voltage $V_{DS}=0$	V_{GS}	± 7.0	V
Drain current (DC)	I_D	± 100	mA
Drain current(pulse) *	I_D	± 200	mA
Power dissipation	P_D	200	mW
Operating temperature	T_{opt}	-55 to +80	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

* $PW \leq 10 \text{ ms}$; $d \leq 50\%$.

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I_{DSS}	$V_{DS}=-50V, V_{GS}=0$			-10	μA
Gate leakage current	I_{GSS}	$V_{GS}=\pm 7.0V, V_{DS}=0$			± 5	μA
Gate cut-off voltage	$V_{GS(off)}$	$V_{DS}=-3V, I_D=-1 \mu\text{A}$	-1.2	-1.6	-2.0	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS}=-3V, I_D=-10\text{mA}$	20	42		ms
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS}=-2.5V, I_D=-1\text{mA}$		25	40	Ω
		$V_{GS}=-4.0V, I_D=-10\text{mA}$		13	20	Ω
Input capacitance	C_{iss}	$V_{DS}=-3V, V_{GS}=0, f=1\text{MHz}$		22		pF
Output capacitance	C_{oss}			12		pF
Reverse transfer capacitance	C_{rss}			4		pF
Turn-on delay time	$t_{d(on)}$	$V_{GS(on)}=-3V, R_G=10 \Omega, V_{DD}=-3V, I_D=-20\text{mA}, R_L=150 \Omega$		80		ns
Rise time	t_r			230		ns
Turn-off delay time	$t_{d(off)}$			40		ns
Fall time	t_f			70		ns

■ Marking

Marking	H12
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