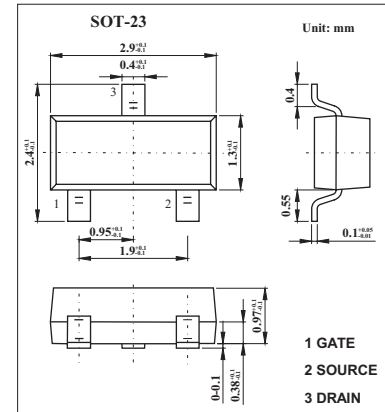
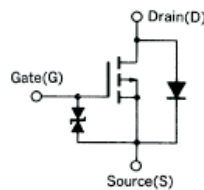


## MOS Fied Effect Transistor

### 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 $V_{DS}=0$	$V_{GS}$	$\pm 7.0$	V
Drain current (DC)	$I_D$	$\pm 100$	mA
Drain current(pulse) *	$I_D$	$\pm 200$	mA
Power dissipation	$P_D$	200	mW
Operating temperature	$T_{opt}$	-55 to +80	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\*  $PW \leq 10$  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	$\mu\text{A}$
Gate leakage current	$I_{GSS}$	$V_{GS}=\pm 7.0V, V_{DS}=0$			$\pm 5$	$\mu\text{A}$
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	$\Omega$
		$V_{GS}=-4.0V, I_D=-10\text{mA}$		13	20	$\Omega$
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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