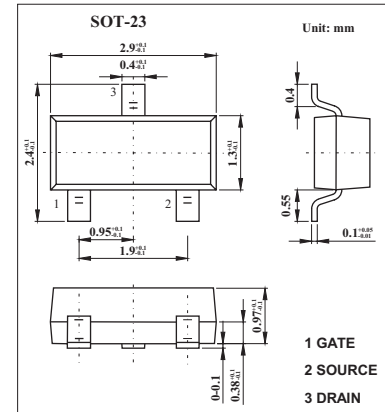
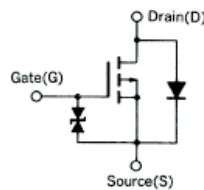


## MOS Fied Effect Transistor

### 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 Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage V <sub>GS</sub> =0	V <sub>DSS</sub>	-50	V
Gate to source voltage V <sub>DS</sub> =0	V <sub>GSS</sub>	±7.0	V
Drain current (DC)	I <sub>D</sub>	±100	mA
Drain current(pulse) *	I <sub>D</sub>	±200	mA
Power dissipation	P <sub>D</sub>	200	mW
Operating temperature	T <sub>opt</sub>	-55 to +80	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

\* PW ≤ 10 ms; d ≤ 50%.

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I <sub>DSS</sub>	V <sub>DS</sub> =-50V, V <sub>GS</sub> =0			-10	μ A
Gate leakage current	I <sub>GSS</sub>	V <sub>GS</sub> =±7.0V, V <sub>DS</sub> =0			±5	μ A
Gate cut-off voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> =-3V, I <sub>D</sub> =-1 μ A	-1.2	-1.6	-2.0	V
Forward transfer admittance	Y <sub>fs</sub>	V <sub>DS</sub> =-3V, I <sub>D</sub> =-10mA	20	42		ms
Drain to source on-state resistance	R <sub>DS(on)</sub>	V <sub>GS</sub> =-2.5V, I <sub>D</sub> =-1mA		25	40	Ω
		V <sub>GS</sub> =-4.0V, I <sub>D</sub> =-10mA		13	20	Ω
Input capacitance	C <sub>iss</sub>	V <sub>DS</sub> =-3V, V <sub>GS</sub> =0, f=1MHZ		22		pF
Output capacitance	C <sub>oss</sub>			12		pF
Reverse transfer capacitance	C <sub>rss</sub>			4		pF
Turn-on delay time	t <sub>d(on)</sub>	V <sub>GS(on)</sub> =-3V, R <sub>G</sub> =10 Ω, V <sub>DD</sub> =-3V, I <sub>D</sub> =-20mA R <sub>L</sub> =150 Ω		80		ns
Rise time	t <sub>r</sub>			230		ns
Turn-off delay time	t <sub>d(off)</sub>			40		ns
Fall time	t <sub>f</sub>			70		ns

#### ■ Marking

Marking	H12
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