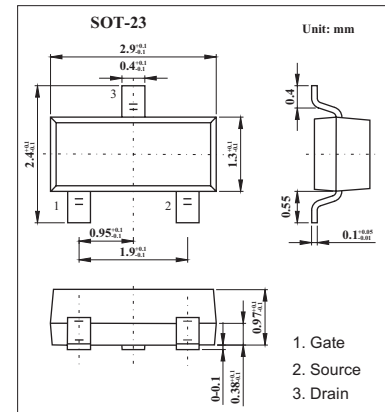
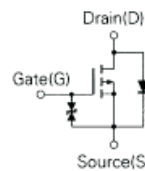


## MOS Field Effect Transistor

### 2SJ461

#### ■ Features

- Can be driven by a 2.5V power source.
- 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	$V_{DS}$	-50	V
Gate to source voltage	$V_{GS}$	$\pm 7.0$	V
Drain current (DC)	$I_D$	$\pm 0.1$	A
Drain current(pulse) *	$I_D$	$\pm 0.2$	A
Power dissipation	$P_D$	200	mW
Channel temperature	$T_{ch}$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\*  $PW \leq 10 \mu\text{s}$ ;  $d \leq 1\%$ .

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain to source breakdown voltage	$V_{BSS}$	$I_D = -10\text{mA}, V_{GS} = 0$	-20			V
Gate to source breakdown voltage	$V_{GSS}$	$I_G = \pm 200 \mu\text{A}, V_{DS} = 0$	$\pm 10$			V
Drain cut-off current	$I_{DSS}$	$V_{DS} = -50\text{V}, V_{GS} = 0$			-100	$\mu\text{A}$
Gate leakage current	$I_{GSS}$	$V_{GS} = \pm 7.0\text{V}, V_{DS} = 0$			$\pm 10$	$\mu\text{A}$
Gate to source cutoff voltage	$V_{GS(off)}$	$V_{DS} = -3.0\text{V}, I_D = -1 \mu\text{A}$	-0.7	-0.9	-1.3	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = -3.0\text{V}, I_D = -10\text{mA}$	12			ms
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS} = -2.5\text{V}, I_D = -3\text{mA}$		46	100	$\Omega$
		$V_{GS} = -4.0\text{V}, I_D = -10\text{mA}$		31	50	$\Omega$
Input capacitance	$C_{iss}$	$V_{DS} = -3.0\text{V}, V_{GS} = 0, f = 1\text{MHz}$		6		pF
Output capacitance	$C_{oss}$			9		pF
Reverse transfer capacitance	$C_{rss}$			1.6		pF
Turn-on delay time	$t_{d(on)}$			32		ns
Rise time	$t_r$	$V_{DD} = -3.0\text{V}, V_{GS(on)} = -3.0\text{V}, I_D = -20\text{mA}$ $R_L = 200 \Omega, R_G = 10 \Omega$		270		ns
Turn-off delay time	$t_{d(off)}$			45		ns
Fall time	$t_f$			130		ns