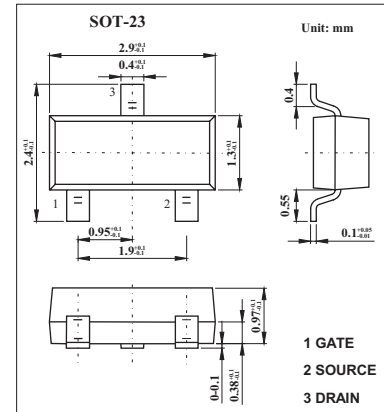
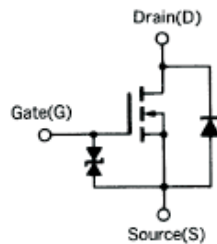


## MOS Field Effect Transistor

### 2SK1133

#### ■ Features

- Directly driven by Ics having a 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 biasresistor.



#### ■ 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)	$I_D$	$\pm 100$	mA
Drain current(pulse) *	$I_D$	$\pm 200$	mA
Power dissipation	$P_D$	200	mW
Channel temperature	$T_{ch}$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\*  $PW \leq 10\text{ms}$ , duty cycle  $\leq 50\%$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain cut-off current	$I_{DSS}$	$V_{DS}=50\text{V}, V_{GS}=0$			-10	$\mu\text{A}$
Gate leakage current	$I_{GSS}$	$V_{GS}=\pm 7\text{V}, V_{DS}=0$			$\pm 10$	$\mu\text{A}$
Gate to source cutoff voltage	$V_{GS(off)}$	$V_{DS}=5.0\text{V}, I_D=1\mu\text{A}$	1.0	1.7	2.0	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS}=5.0\text{V}, I_D=20\text{mA}$	20	40		ms
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS}=4\text{V}, I_D=20\text{mA}$		16	50	$\Omega$
Input capacitance	$C_{iss}$	$V_{DS}=5.0\text{V}, V_{GS}=0, f=1\text{MHz}$		7		pF
Output capacitance	$C_{oss}$		6		pF	
Reverse transfer capacitance	$C_{rss}$		2		pF	
Turn-on delay time	$t_{d(on)}$	$V_{GS(on)}=0, V_{DD}=5\text{V}, f=1\text{MHz}$		6		ns
Rise time	$t_r$		25		ns	
Turn-off delay time	$t_{d(off)}$		36		ns	
Fall time	$t_f$		35		ns	

#### ■ Marking

Marking	G11