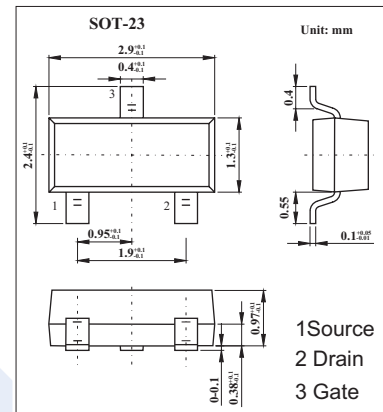


## N-Channel Junction Silicon FET

### 2SK303

#### ■ Features

- Ideal for potentiometers, analog switches, low frequency amplifiers, constant current supplies, and impedance conversion.



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	$V_{DS}$	30	V
Gate to Drain voltage	$V_{GDS}$	-30	V
Gate current	$I_G$	10	m A
Drain current	$I_D$	20	m A
Power dissipation	$P_D$	200	mW
Channel temperature	$T_{ch}$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

\*  $PW \leq 10 \mu s$ , Duty Cycle  $\leq 1\%$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Gate to drain	$V_{GDS}$	$I_G = -10 \mu A$	-30			V
Gate to source leakage current	$I_{GSS}$	$V_{GS} = -20V$			-1.0	nA
Drain cut-off current	$I_{DSS}$	$V_{DS} = 10V, V_{GS} = 0$	0.6		12.0	mA
Cutoff voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1 \mu A$		-1	-4	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$	2.5	6.0		ms
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS} = 0, V_{DS} = 10mV$		250		$\Omega$
Input capacitance	$C_{iss}$	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		5		pF
Reverse transfer capacitance	$C_{rss}$			1.5		pF

#### ■ $I_{DSS}$ Classification unit: mA

Marking	V2	V3	V4	V5
Rank	2	3	4	5
$I_{DSS}$	0.6~1.5	1.2~3.0	2.5~6.0	5.0~12.0