

## MOS Fied Effect Transistor

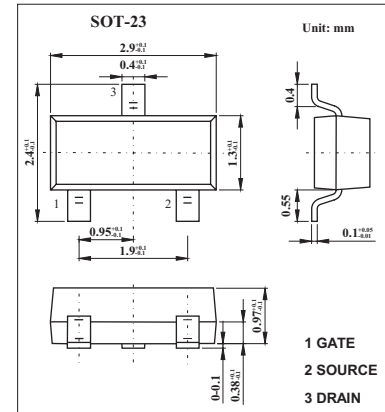
### 2SJ208

#### ■ Features

- Directly driven by lcs having a 3V poer supply.
- Has low on-state resistance

$R_{DS(on)}=3.0\ \Omega\ \text{MAX.}@V_{GS}=-2.5V, I_D=-30mA$

$R_{DS(on)}=1.0\ \Omega\ \text{MAX.}@V_{GS}=-4.0V, I_D=-1.0A$



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain to source voltage $V_{GS}=0$	$V_{DSS}$	-16	V
Gate to source voltage $V_{DS}=0$	$V_{GSS}$	$\pm 16$	V
Drain current (DC)	$I_D$	$\pm 2.0$	A
Drain current(pulse) *	$I_D$	$\pm 4.0$	A
Power dissipation	$P_D$	2.0	W
Channel temperature	$T_{ch}$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\*  $PW \leq 10\ \text{ms}; d \leq 50\%$ .

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

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	$I_{DSS}$	$V_{DS}=-16V, V_{GS}=0$			-10	$\mu\text{A}$
Gate leakage current	$I_{GSS}$	$V_{GS}=\pm 16V, V_{DS}=0$			$\pm 5$	$\mu\text{A}$
Gate cut-off voltage	$V_{GS(off)}$	$V_{DS}=-5.0V, I_D=-1mA$	-1.4	-1.9	-2.4	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS}=-3.0V, I_D=-1.0A$	0.4	1.6		s
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS}=-2.5V, I_D=-30mA$		1.6	3.0	$\Omega$
		$V_{GS}=-4V, I_D=-1.0A$		0.7	1.0	$\Omega$
Input capacitance	$C_{iss}$	$V_{DS}=-3.0V, V_{GS}=0, f=1\text{MHZ}$		230		pF
Output capacitance	$C_{oss}$			210		pF
Reverse transfer capacitance	$C_{rss}$			35		pF
Turn-on delay time	$t_{d(on)}$				175	ns
Rise time	$t_r$	$V_{GS(on)}=-3V, R_G=10\ \Omega, V_{DD}=-10V, I_D=-0.1A\ R_L=20\ \Omega$		540		ns
Turn-off delay time	$t_{d(off)}$			200		ns
Fall time	$t_f$				230	ns

#### ■ Marking

Marking	PF
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