

MOS Field Effect Transistor

2SJ212

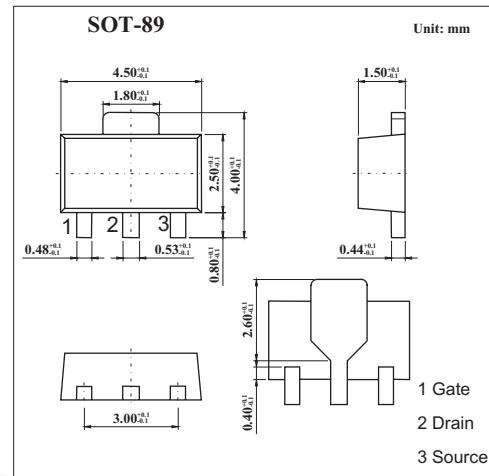
■ Features

- Directly driven by Ics having a 5V power supply.

- Has low on-state resistance

$R_{DS(on)} = 4.0 \Omega$ MAX. @ $V_{GS} = -4.0V, I_D = -0.3A$

$R_{DS(on)} = 3.0 \Omega$ MAX. @ $V_{GS} = -1.0V, I_D = -0.5A$

■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain to source voltage $V_{GS}=0$	V_{DSS}	-60	V
Gate to source voltage $V_{DS}=0$	V_{GSS}	± 20	V
Drain current (DC)	I_D	± 500	mA
Drain current(pulse) *	I_D	± 1.0	A
Power dissipation	P_D	2.0	W
Channel temperature	T_{ch}	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

* $P_W \leq 10$ ms; $d \geq 50\%$.

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain cut-off current	I_{DSS}	$V_{DS} = -60V, V_{GS} = 0$			-10	μA
Gate leakage current	I_{GSS}	$V_{GS} = \pm 20V, V_{DS} = 0$			± 10	μA
Gate cut-off voltage	$V_{GS(off)}$	$V_{DS} = -10V, I_D = -1mA$	-1.0	-2.2	-3.0	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = -5.0V, I_D = -0.3A$	0.4	0.54		s
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS} = -4.0V, I_D = -0.3A$		1.5	4.0	Ω
		$V_{GS} = -10V, I_D = -0.5A$		0.8	3.0	Ω
Input capacitance	C_{iss}	$V_{DS} = -5.0V, V_{GS} = 0, f = 1MHz$		160		pF
Output capacitance	C_{oss}			100		pF
Reverse transfer capacitance	C_{rss}			25		pF
Turn-on delay time	$t_{d(on)}$	$V_{GS(on)} = -4V, R_G = 10\Omega, V_{DD} = -5V, I_D = -0.3A, R_L = 1.5\Omega$		130		ns
Rise time	t_r			380		ns
Turn-off delay time	$t_{d(off)}$			95		ns
Fall time	t_f			140		ns

■ Marking

Marking	PD
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