

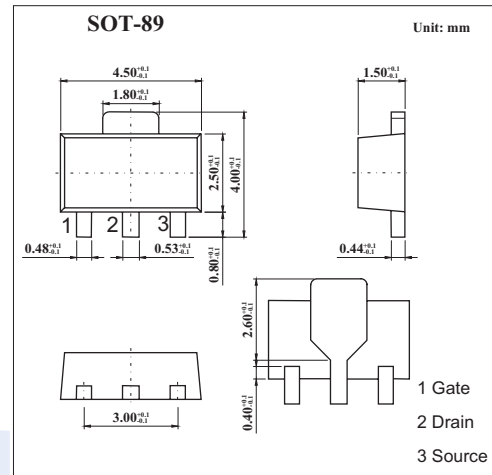
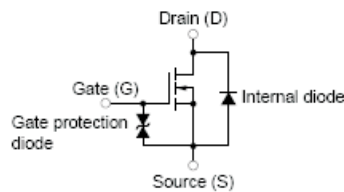
## MOS Field Effect Transistor 2SK2111

### ■ Features

- Low on-resistance

$R_{DS(on)}=0.6\ \Omega\ \text{MAX.}@V_{GS}=4.0V, I_D=0.5A$

- High switching speed



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

Parameter	Symbol	Rating	Unit
Drain to source voltage	$V_{DS}$	60	V
Gate to source voltage	$V_{GS}$	$\pm 20$	V
Drain current	$I_D$	$\pm 1.0$	A
	$I_{DP}$	$\pm 2.0$	A
Power dissipation *	$P_D$	2.0	W
Channel temperature	$T_{ch}$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\*  $16\ \text{cm}^2 \times 0.7\ \text{mm}$ , ceramic substrate used

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Drain cut-off current	$I_{DSS}$	$V_{DS}=60V, V_{GS}=0$			1.0	$\mu\text{A}$
Gate leakage current	$I_{GSS}$	$V_{GS}=\pm 20V, V_{DS}=0$			$\pm 10$	$\mu\text{A}$
Gate threshold voltage	$V_{GS(th)}$	$V_{DS}=10V, I_D=1\text{mA}$	0.8	1.4	2.0	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS}=10V, I_D=0.5A$	0.4			S
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS}=4.0V, I_D=0.5A$		0.32	0.6	$\Omega$
		$V_{GS}=10V, I_D=0.5A$		0.24	0.45	$\Omega$
Input capacitance	$C_{iss}$	$V_{DS}=10V, V_{GS}=0, f=1\text{MHz}$		170		pF
Output capacitance	$C_{oss}$			87		pF
Reverse transfer capacitance	$C_{rss}$			32		pF
Turn-on delay time	$t_{d(on)}$				2.8	
Rise time	$t_r$	$I_D=0.5A, V_{GS(on)}=10V, R_L=50\ \Omega, R_G=10\ \Omega, V_{DD}=25V$		2.3		ns
Turn-off delay time	$t_{d(off)}$			55		ns
Fall time	$t_f$			27		ns

### ■ Marking

Marking	NU
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