

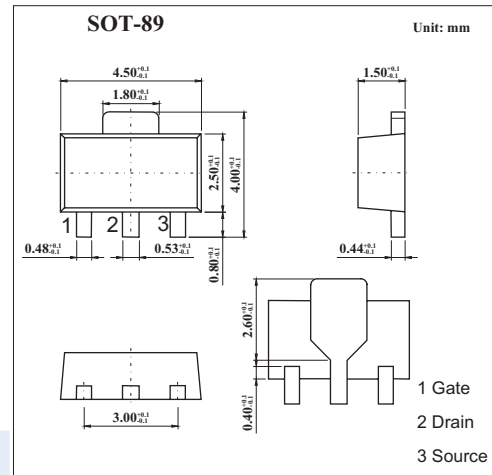
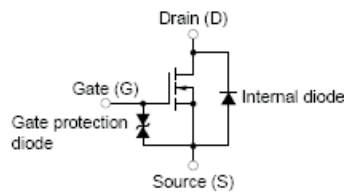
MOS Field Effect Transistor 2SK2111

■ 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}	± 20	V
Drain current	I_D	± 1.0	A
	I_{DP}	± 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	μA
Gate leakage current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0$			± 10	μA
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	Ω
		$V_{GS}=10V, I_D=0.5A$		0.24	0.45	Ω
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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