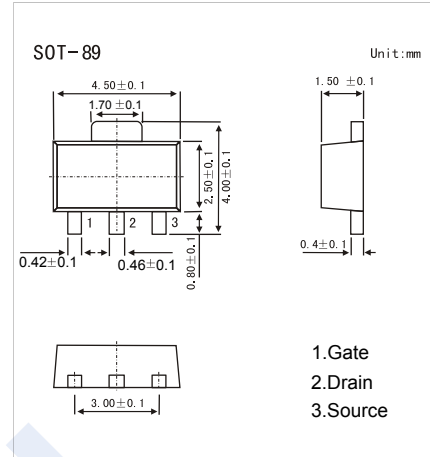
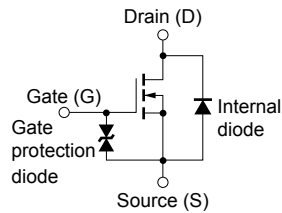


## N-Channel MOSFET

### 2SK2111-HF

#### Features

- $V_{DS} (V) = 60V$
- $I_D = 1 A$
- $R_{DS(ON)} < 0.45 \Omega$  ( $V_{GS} = 10V$ )
- $R_{DS(ON)} < 0.6 \Omega$  ( $V_{GS} = 4V$ )
- Pb-Free Package May be Available.  
The G-Suffix Denotes a Pb-Free Lead Finish



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	60	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	
Continuous Drain Current	$I_D$	1	A
Pulsed Drain Current (Note.1)	$I_{DM}$	2	
Power Dissipation	$P_D$	2	W
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 to 150	

Note.1:  $PW \leq 10ms$ , Duty Cycle  $\leq 50\%$

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

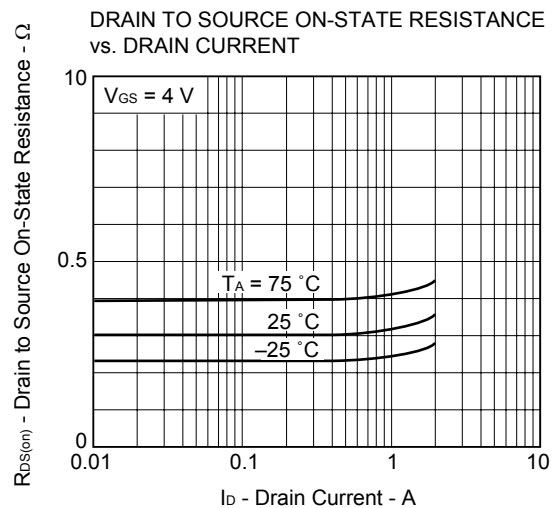
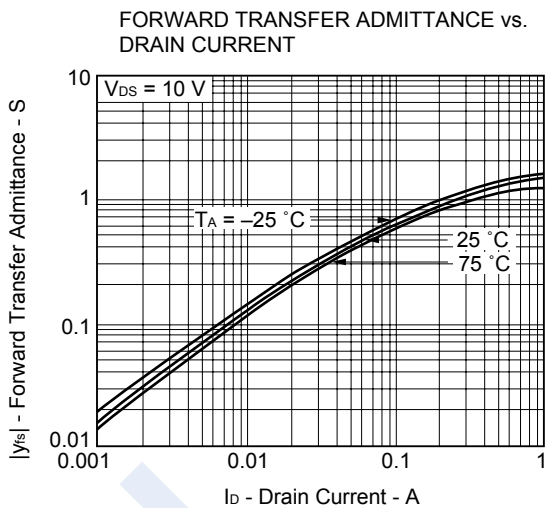
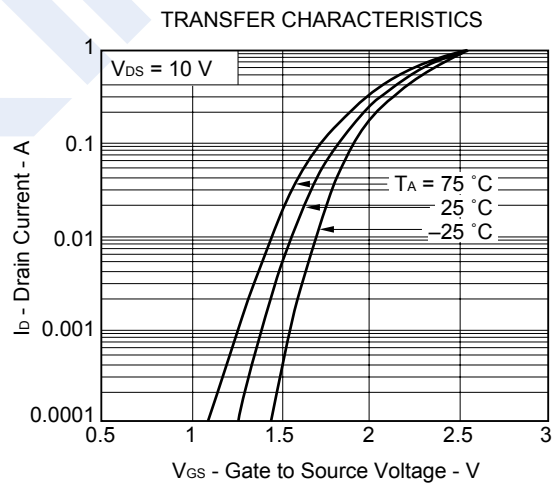
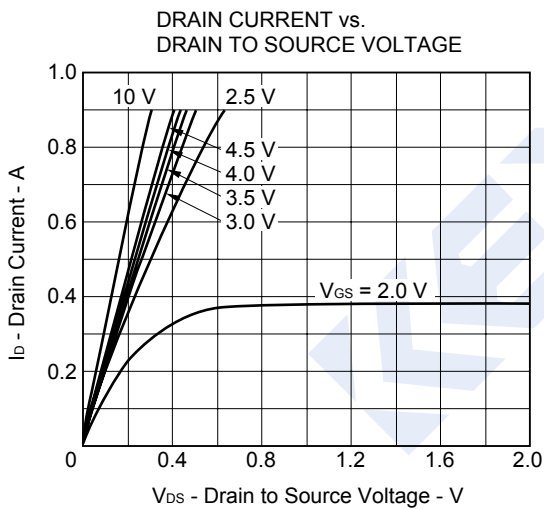
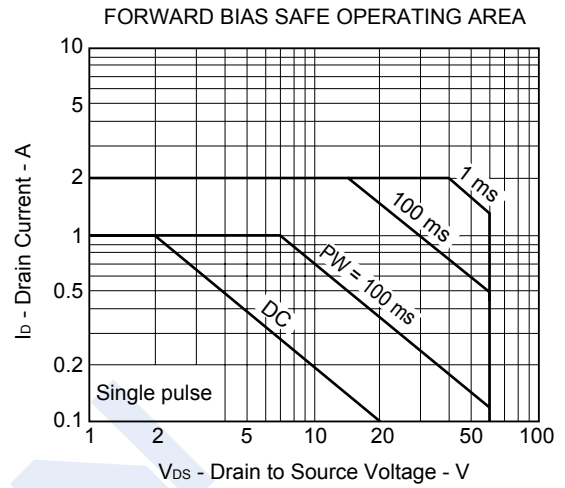
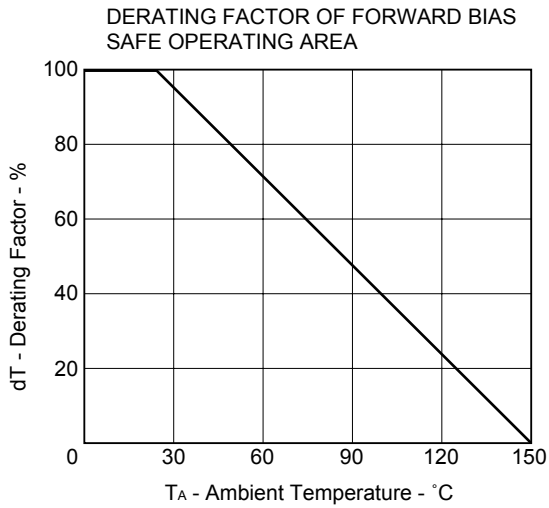
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$V_{DSS}$	$I_D=250 \mu A$ , $V_{GS}=0V$	60			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=60V$ , $V_{GS}=0V$			1	$\mu A$
Gate-Body Leakage Current	$I_{GSS}$	$V_{DS}=0V$ , $V_{GS}=\pm 20V$			$\pm 10$	$\mu A$
Gate Cutt-off Voltage	$V_{GS(off)}$	$V_{DS}=10V$ , $I_D=1mA$	0.8		2	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ , $I_D=0.5A$			0.45	$\Omega$
		$V_{GS}=4V$ , $I_D=0.5A$			0.6	
Forward Transconductance	$g_{FS}$	$V_{DS}=10V$ , $I_D=0.5A$	0.4			S
Input Capacitance	$C_{iss}$	$V_{GS}=0V$ , $V_{DS}=10V$ , $f=1MHz$		170		pF
Output Capacitance	$C_{oss}$			87		
Reverse Transfer Capacitance	$C_{rss}$			32		
Turn-On DelayTime	$t_{d(on)}$				2.8	
Turn-On Rise Time	$t_r$	$V_{GS(on)}=10V$ , $V_{DS}=25V$ , $I_D=0.5A$ , $R_L=50 \Omega$ , $R_G=10 \Omega$		2.3		
Turn-Off DelayTime	$t_{d(off)}$			55		
Turn-Off Fall Time	$t_f$			27		

#### Marking

Marking	NU F
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## N-Channel MOSFET 2SK2111-HF

### Typical Characteristics



## N-Channel MOSFET 2SK2111-HF

### Typical Characteristics

