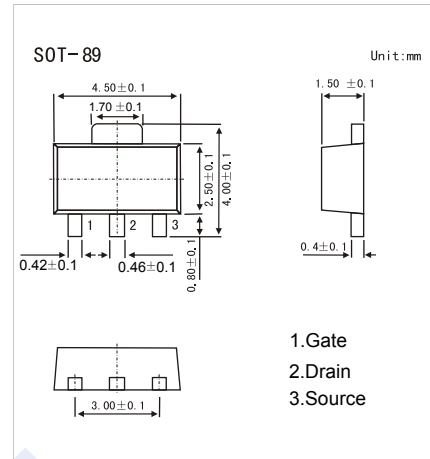
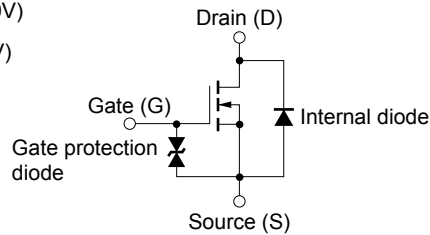


N-Channel MOSFET

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■ Features

- $V_{DS} (V) = 100V$
- $I_D = 1 A$
- $R_{DS(ON)} < 0.8 \Omega$ ($V_{GS} = 10V$)
- $R_{DS(ON)} < 1.2 \Omega$ ($V_{GS} = 4V$)



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 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}	$I_D=250 \mu A$, $V_{GS}=0V$	100			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=100V$, $V_{GS}=0V$			1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{DS}=0V$, $V_{GS}=\pm 20V$			± 10	μA
Gate Cutt-off Voltage	$V_{GS(off)}$	$V_{DS}=10V$, $I_D=1mA$	0.8		2	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$, $I_D=0.5A$			0.8	Ω
		$V_{GS}=4V$, $I_D=0.5A$			1.2	
Forward Transconductance	g_{FS}	$V_{DS}=10V$, $I_D=0.5A$	0.4			S
Input Capacitance	C_{iss}	$V_{GS}=0V$, $V_{DS}=10V$, $f=1MHz$		178		pF
Output Capacitance	C_{oss}			59		
Reverse Transfer Capacitance	C_{rss}			16		
Turn-On DelayTime	$t_{d(on)}$			2.9		
Turn-On Rise Time	t_r	$V_{GS(on)}=10V$, $V_{DS}=25V$, $I_D=0.5A$, $R_L=50 \Omega$, $R_G=10 \Omega$		1.7		ns
Turn-Off DelayTime	$t_{d(off)}$			60		
Turn-Off Fall Time	t_f			15		

■ Marking

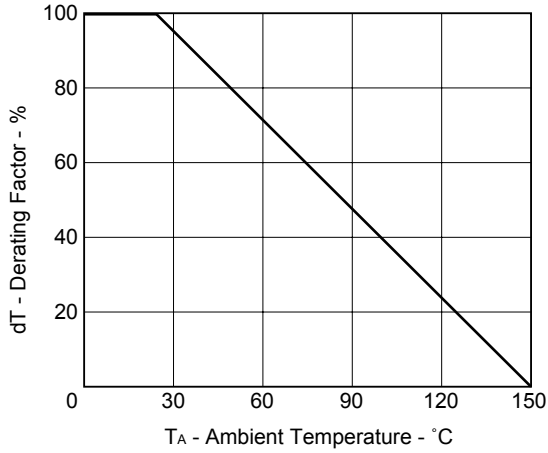
Marking	NV
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N-Channel MOSFET

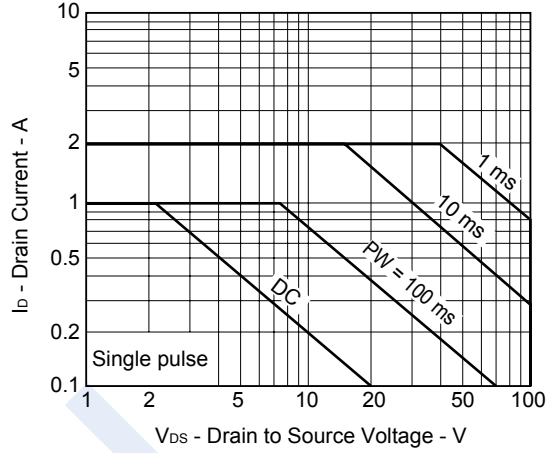
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■ Typical Characteristics

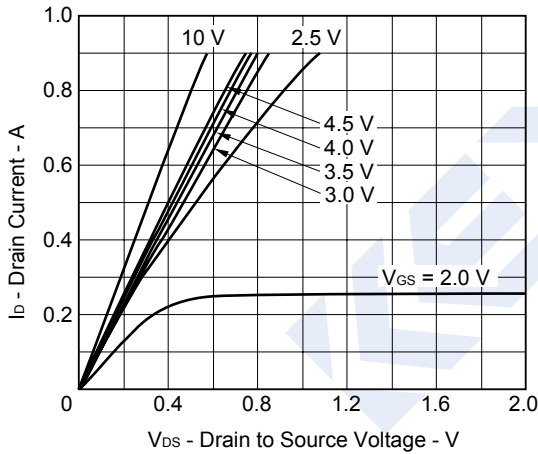
DERATING FACTOR OF FORWARD BIAS SAFE OPERATING AREA



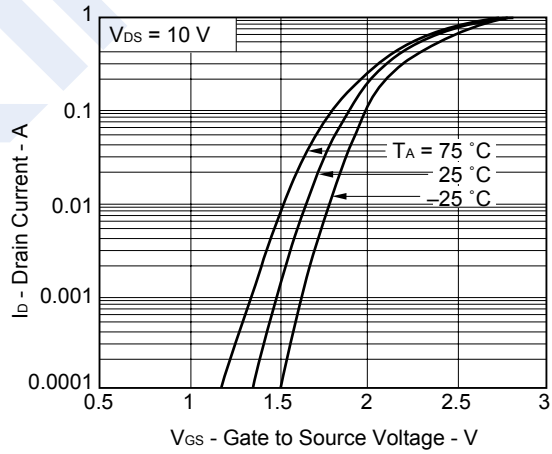
FORWARD BIAS SAFE OPERATING AREA



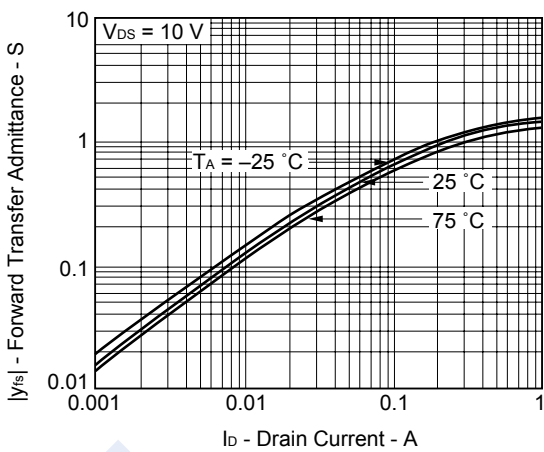
DRAIN CURRENT vs. DRAIN TO SOURCE VOLTAGE



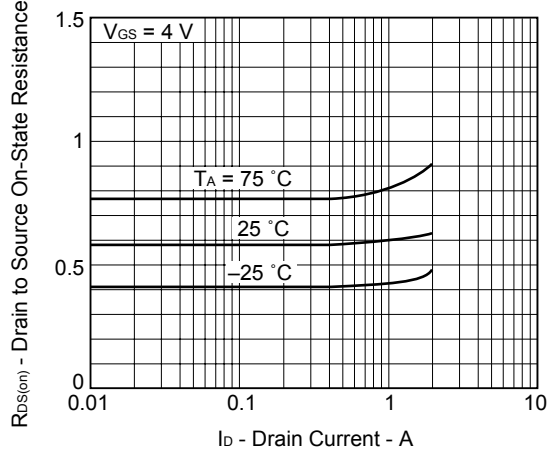
TRANSFER CHARACTERISTICS



FORWARD TRANSFER ADMITTANCE vs. DRAIN CURRENT



DRAIN TO SOURCE ON-STATE RESISTANCE vs. DRAIN CURRENT



N-Channel MOSFET 2SK2112

Typical Characteristics

