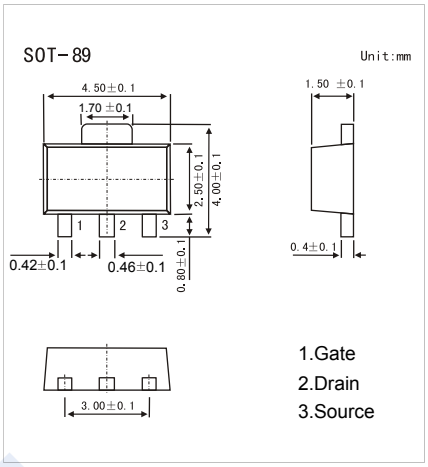
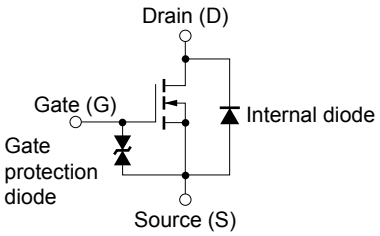
N-Channel MOSFET
2SK2110



■ Features

- $V_{DS\ (V)}$ = 100V
- I_D = 0.5 A
- $R_{DS(ON)}$ < 1.2Ω (V_{GS} = 10V)
- $R_{DS(ON)}$ < 1.5Ω (V_{GS} = 4V)



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	±20	
Continuous Drain Current	I_D	0.5	A
Pulsed Drain Current (Note.1)	I_{DM}	1	
Power Dissipation	P_D	2	W
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

Note.1: PW ≤ 10ms, Duty Cycle ≤ 50%

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	I_D=250μA, V_{GS}=0V	100			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=100V, V_{GS}=0V			1	uA
Gate-Body Leakage Current	I_{GSS}	V_{DS}=0V, V_{GS}=±20V			±10	uA
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=0.3A			1.2	Ω
		V_{GS}=4V, I_D=0.3A			1.5	
Forward Transconductance	g_{FS}	V_{DS}=10V, I_D=0.3A	0.4			S
Input Capacitance	C_{iss}	V_{GS}=0V, V_{DS}=10V, f=1MHz		100		pF
Output Capacitance	C_{oss}			38		
Reverse Transfer Capacitance	C_{rss}			10		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS(on)}$=10V, V_{DS}=25V, I_D=300 mA, R_L=83Ω, R_G=10Ω		2		ns
Turn-On Rise Time	t_r			1.3		
Turn-Off DelayTime	$t_{d(off)}$			38		
Turn-Off Fall Time	t_f			13		

■ Marking

Marking	NT

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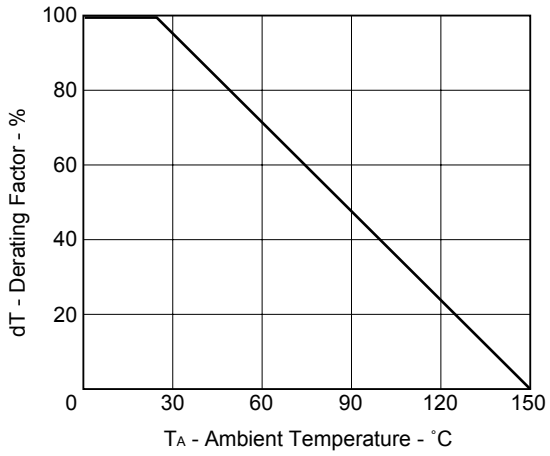
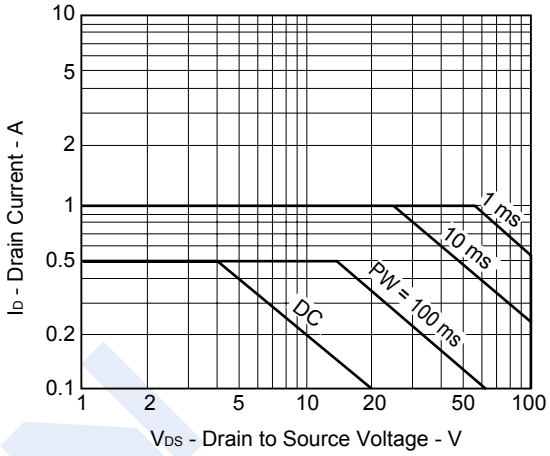
■ Typical Characterisitics

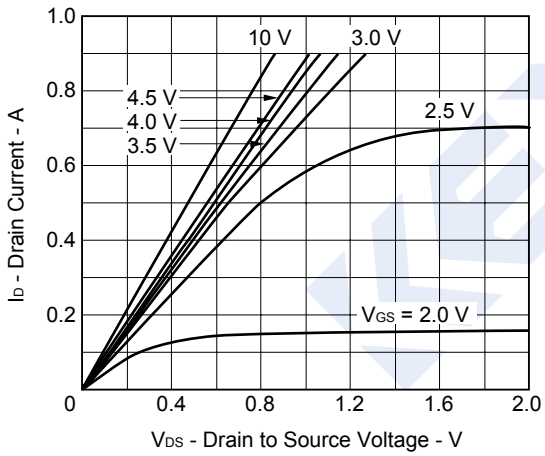
DERATING FACTOR OF FORWARD BIAS SAFE OPERATING AREA



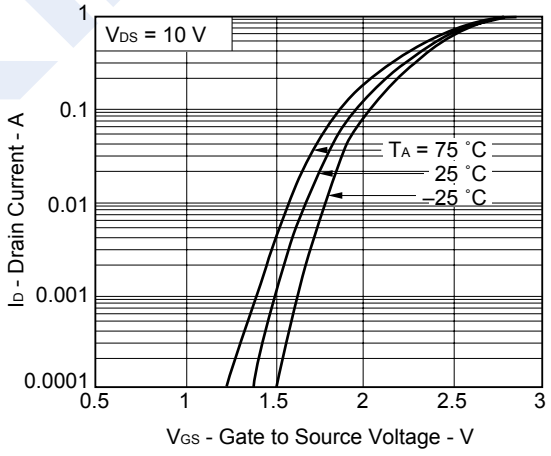
FORWARD BIAS SAFE OPERATING AREA



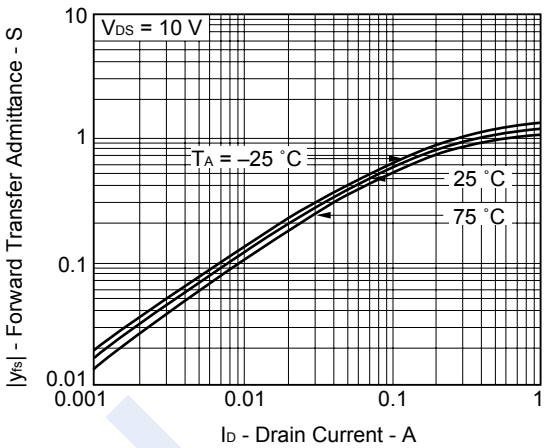
DRAIN CURRENT vs. DRAIN TO SOURCE VOLTAGE



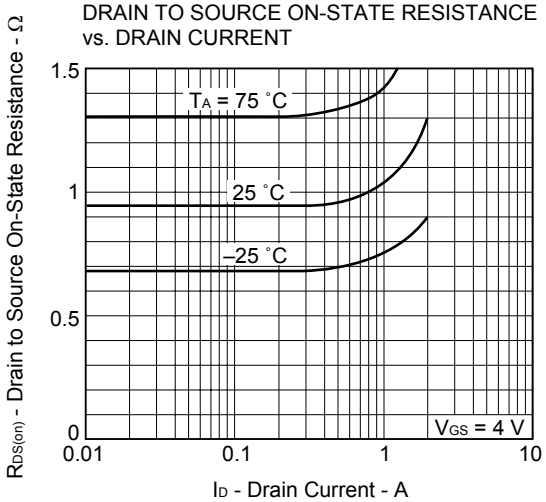
TRANSFER CHARACTERISTICS



FORWARD TRANSFER ADMITTANCE vs. DRAIN CURRENT



DRAIN TO SOURCE ON-STATE RESISTANCE vs. DRAIN CURRENT



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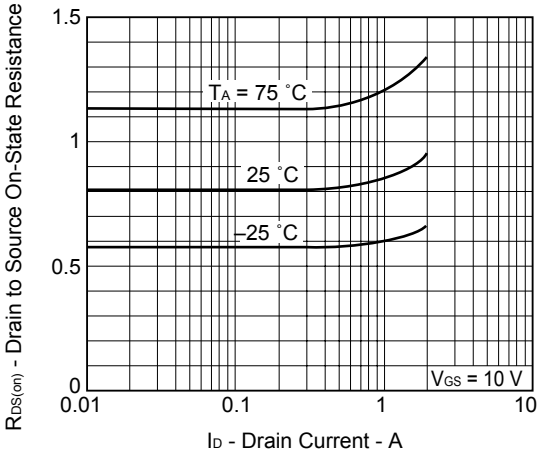
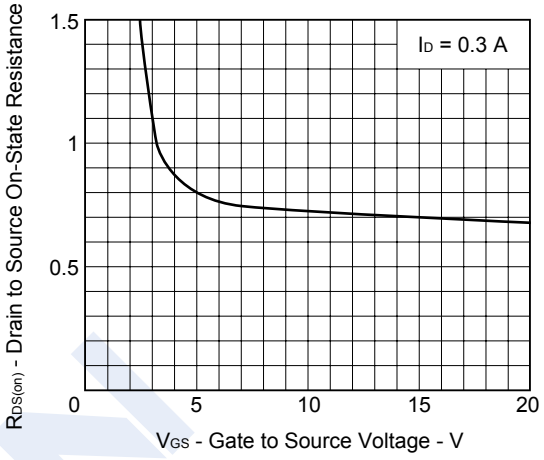
■ Typical Characterisitics

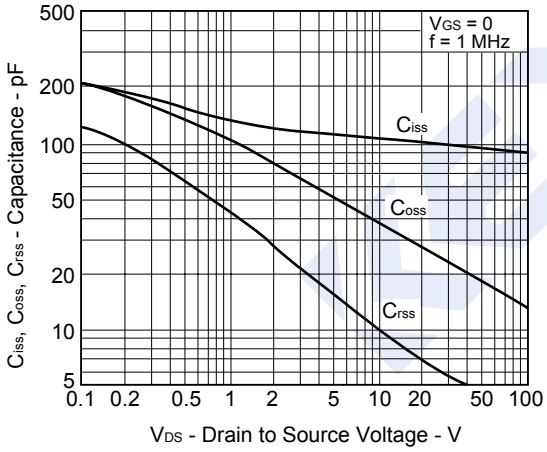
DRAIN TO SOURCE ON-STATERESISTANCE
vs. DRAIN CURRENT



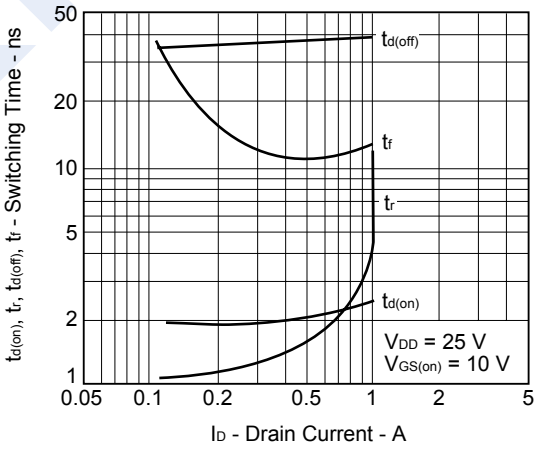
DRAIN TO SOURCE ON-STATE RESISTANCE
vs. GATE TO SOURCE VOLTAGE



CAPACITANCE vs.
DRAIN TO SOURCE VOLTAGE



SWITCHING CHARACTERISTICS



SOURCE TO DRAIN DIODE
FORWARD VOLTAGE