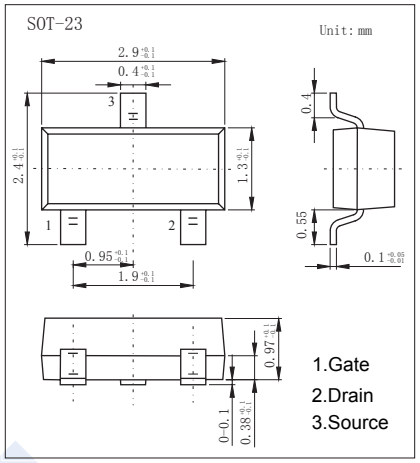
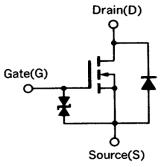
N-Channel MOSFET
2SK1133



■ Features

- $V_{DS\ (V)}$ = 50V
- I_D = 100 mA
- $R_{DS(ON)}$ < 50Ω (V_{GS} = 4V)
- Complments the 2SJ166



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	50	V
Gate-Source Voltage	V_{GS}	±7	
Continuous Drain Current	I_D	100	mA
Pulsed Drain Current (Note.1)	I_{DM}	200	
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	150	℃
Channel Temperature	T_{ch}	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	50			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=50V, V_{GS}=0V			10	uA
Gate-Body Leakage Current	I_{GSS}	V_{DS}=0V, V_{GS}=±7V			±10	uA
Gate Cut-off Voltage	$V_{GS(off)}$	V_{DS}=5 V I_D=1uA	1		2	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=4V, I_D=20mA			50	Ω
Forward Transconductance	g_{FS}	V_{DS}=5V, I_D=20mA	20	40		ms
Input Capacitance	C_{iss}	V_{GS}=0V, V_{DS}=5V, f=1MHz		7		pF
Output Capacitance	C_{oss}			6		
Reverse Transfer Capacitance	C_{rss}			2		
Turn-On DelayTime	$t_{d(on)}$	V_{GS}=5V, V_{DS}=5V, I_D=20mA, R_L=250Ω ,R_G=10Ω		6		ns
Turn-On Rise Time	t_r			25		
Turn-Off DelayTime	$t_{d(off)}$			36		
Turn-Off Fall Time	t_f			35		

■ Marking

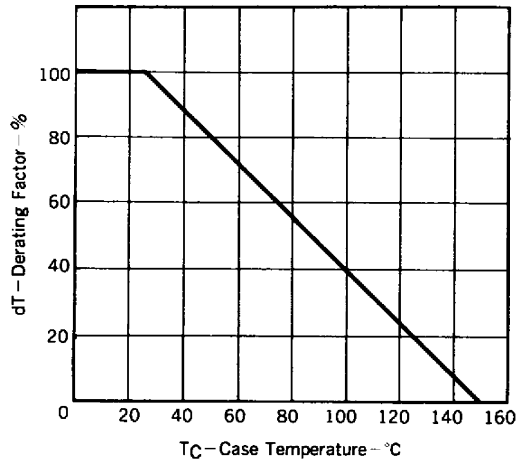
Marking	G11

N-Channel MOSFET

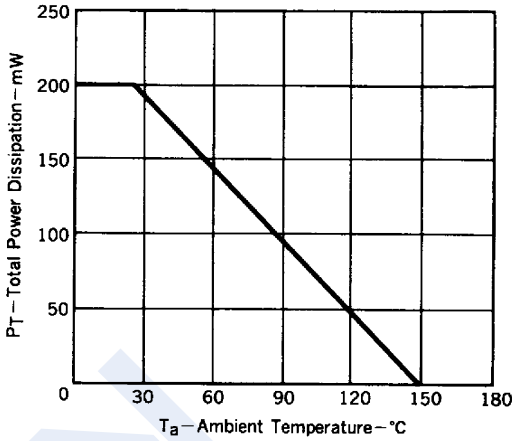
2SK1133

■ Typical Characterisitics

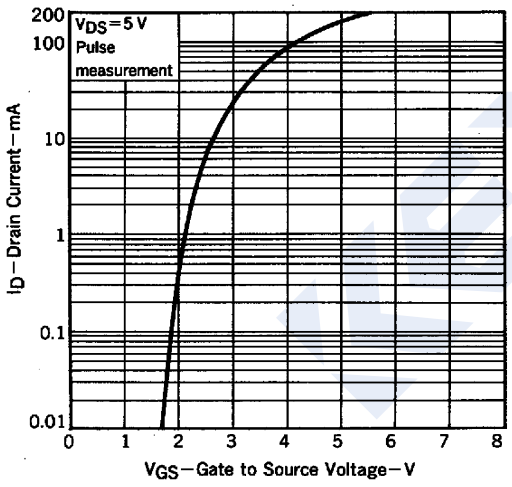
DERATING FACTOR OF FORWARD BIAS SAFE OPERATING AREA



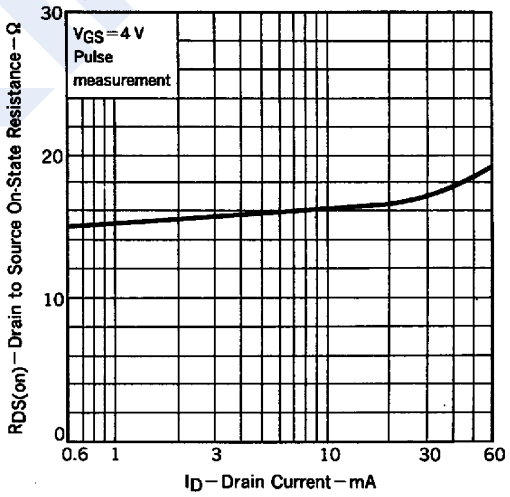
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



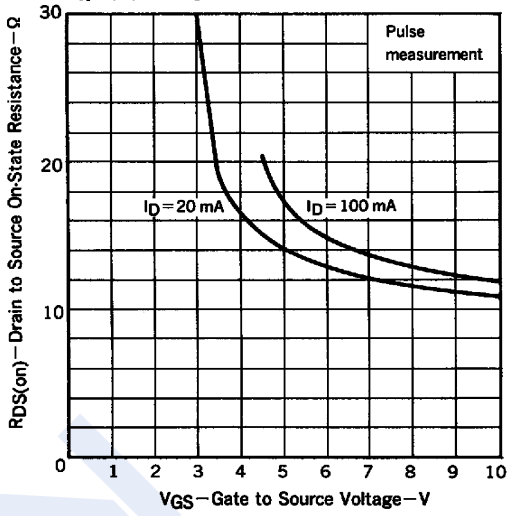
TRANSFER CHARACTERISTICS



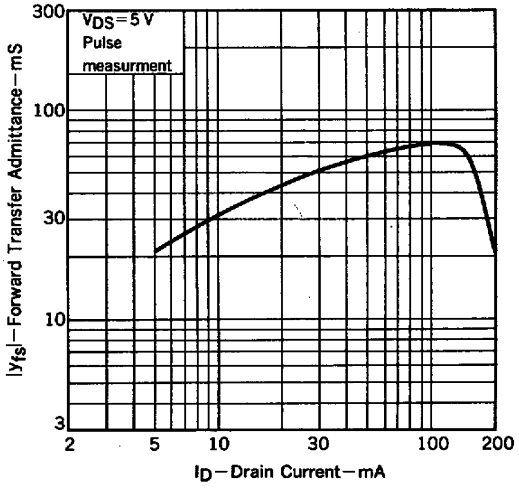
DRAIN TO SOURCE ON-STATE RESISTANCE vs. DRAIN CURRENT



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



FORWARD TRANSFER ADMITTANCE vs. DRAIN CURRENT



N-Channel MOSFET

2SK1133

■ Typical Characterisitics

