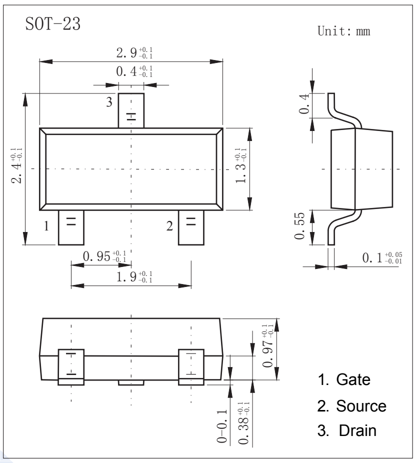
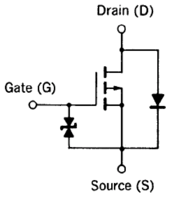
P-Channel MOSFET

2SJ211



■ Features

- V_{DS} (V) =-100V
- I_D =-0.2 A
- $R_{DS(ON)} < 20\Omega$ (V_{GS} =-10V)
- $R_{DS(ON)} < 30\Omega$ (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	-0.2	A
Pulsed Drain Current (Note.1)	I_{DM}	-0.4	
Power Dissipation	P_D	0.2	W
Junction Temperature	T_J	150	℃
Junction Storage Temperature Range	T_{stg}	-55 to 150	

Note.1: PW ⩽ 10 ms, 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 to Source Cutoff Voltage	$V_{GS(off)}$	V_{GS}=-5V I_D=-1mA	-1.4		-2.4	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V, I_D=-10mA			20	Ω
		V_{GS}=-4V, I_D=-10mA			30	
Forward Transconductance	g_{FS}	V_{DS}=-5V, I_D=-10mA	20	45		mS
Input Capacitance	C_{iss}	V_{GS}=0V, V_{DS}=-5V, f=1MHz		27		pF
Output Capacitance	C_{oss}			16		
Reverse Transfer Capacitance	C_{rss}			2		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS(on)}$=-4V, I_D=-10mA, R_L=500Ω ,R_G=10 Ω,V_{DD}=-5V,		110		ns
Turn-On Rise Time	t_r			150		
Turn-Off DelayTime	$t_{d(off)}$			160		
Turn-Off Fall Time	t_f			150		

■ Marking

Marking	H18

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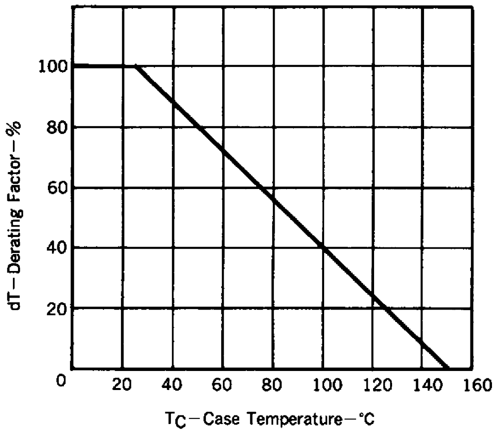
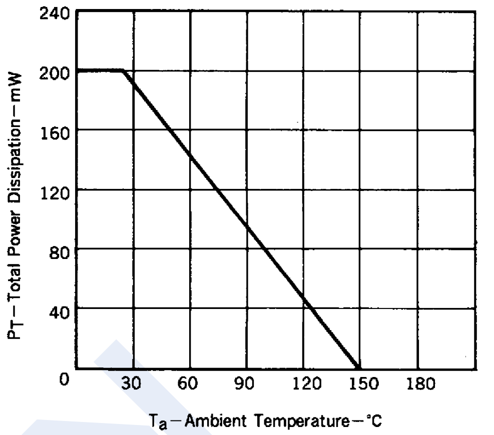
■ Typical Characterisitics

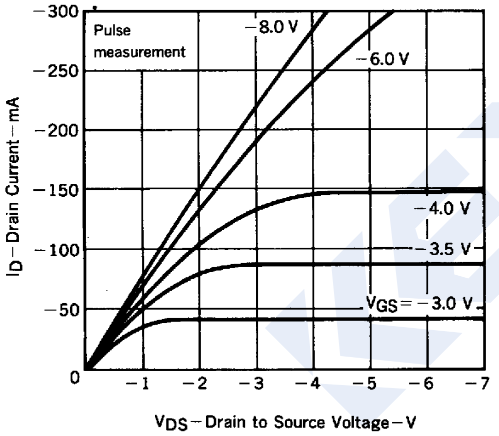
DERATING FACTOR OF FORWARD BIAS SAFE OPERATING AREA



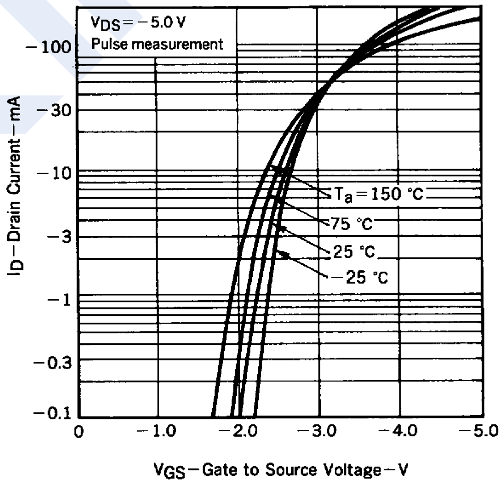
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



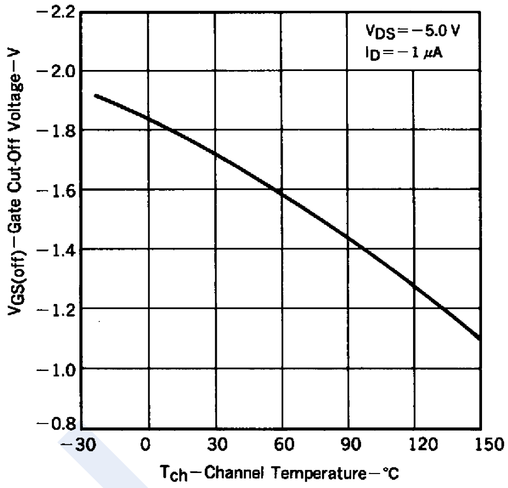
DRAIN CURRENT vs. DRAIN TO SOURCE VOLTAGE



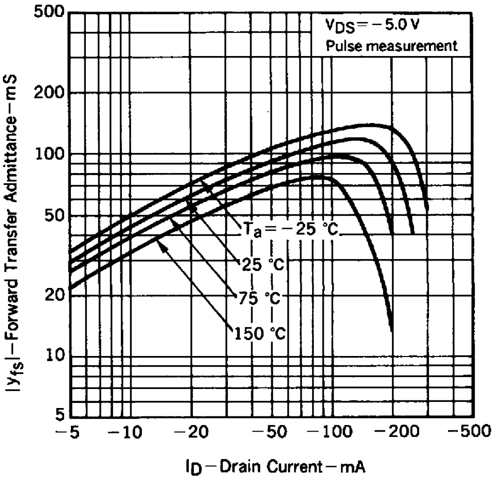
TRANSFER CHARACTERISTICS



GATE TO SOURCE CUTOFF VOLTAGE vs. CHANNEL TEMPERATURE



FORWARD TRANSFER ADMITTANCE vs. DRAIN CURRENT



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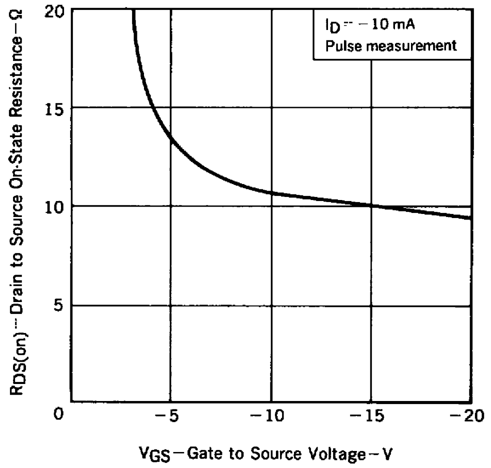
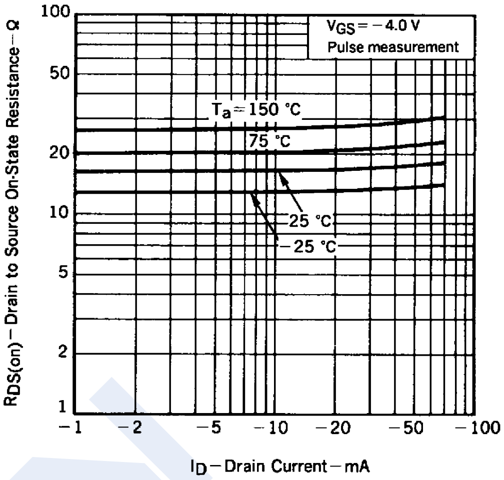
■ Typical Characterisitics

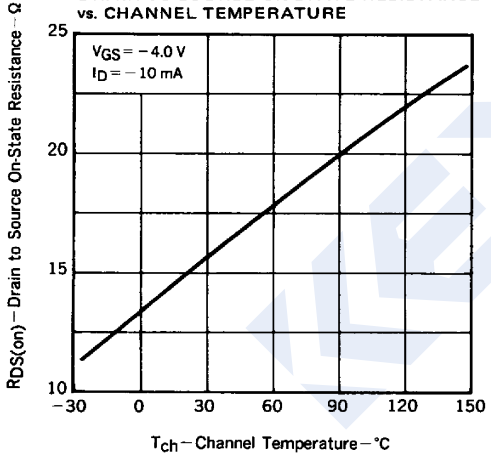
DRAIN TO SOURCE ON-STATE RESISTANCE vs. GATE TO SOURCE VOLTAGE



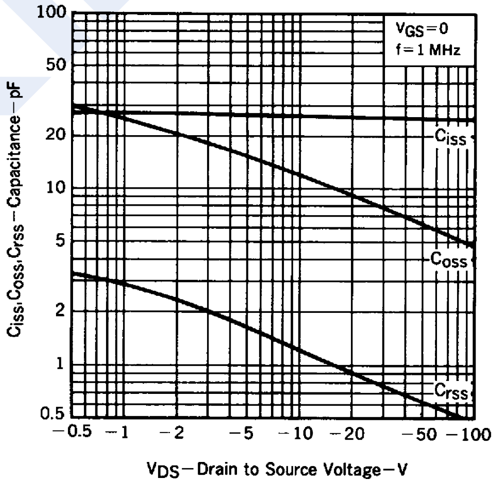
DRAIN TO SOURCE ON-STATE RESISTANCE vs. DRAIN CURRENT



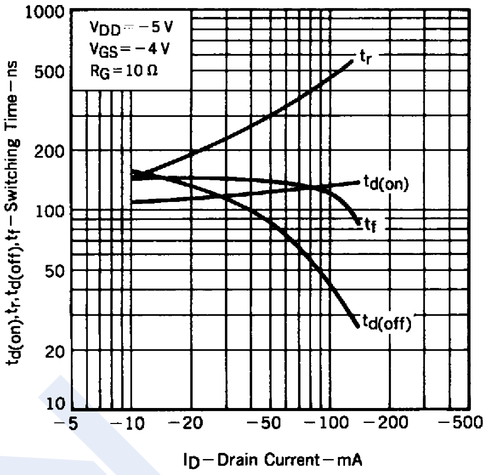
DRAIN TO SOURCE ON-STATE RESISTANCE vs. CHANNEL TEMPERATURE



CAPACITANCE vs. DRAIN TO SOURCE VOLTAGE



SWITCHING CHARACTERISTICS



SOURCE TO DRAIN DIODE FORWARD VOLTAGE