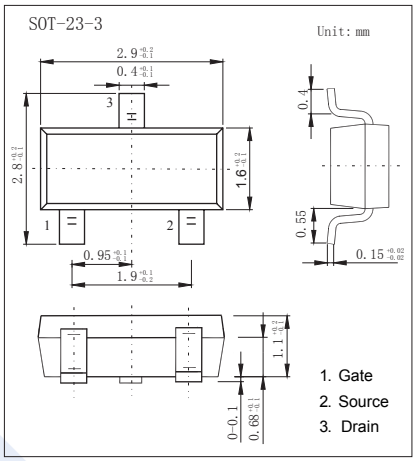
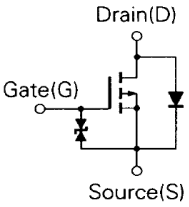
P-Channel MOSFET

2SJ461



■ Features

- V_{DS} (V) =-50V
- I_D =-0.1 A
- $R_{DS(ON)}$ < 50Ω (V_{GS} =-4V)
- $R_{DS(ON)}$ < 100Ω (V_{GS} =-2.5V)



■ 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	-0.1	A
Pulsed Drain Current （Note.1)	I_{DM}	-0.2	
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 ≤ 1%

■ 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			-1	uA
Gate-Body leakage current	I_{GSS}	V_{DS}=0V, V_{GS}=±7V			±3	uA
Gate to Source Cutoff Voltage	$V_{GS(off)}$	V_{GS}=-3V I_D=-1mA	-0.7		-1.3	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-4V, I_D=-10mA			50	Ω
		V_{GS}=-2.5V, I_D=-3mA			100	
Forward Transconductance	g_{FS}	V_{DS}=-3V, I_D=-10mA	12			mS
Input Capacitance	C_{iss}	V_{GS}=0V, V_{DS}=-3V, f=1MHz		6		pF
Output Capacitance	C_{oss}			9		
Reverse Transfer Capacitance	C_{rss}			1.6		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS(on)}$=-3V, I_D=-20mA, R_L=200Ω, R_G=10Ω, V_{DD}=-3V		32		ns
Turn-On Rise Time	t_r			270		
Turn-Off DelayTime	$t_{d(off)}$			45		
Turn-Off Fall Time	t_f			130		

■ Marking

Marking	H19

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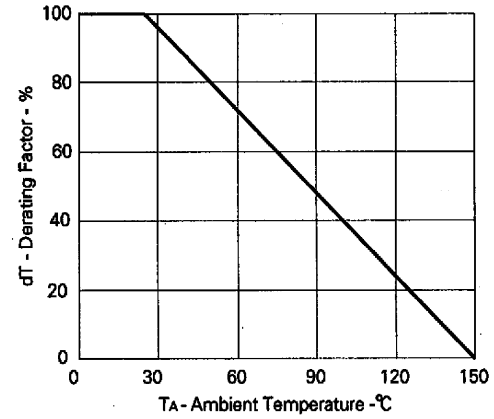
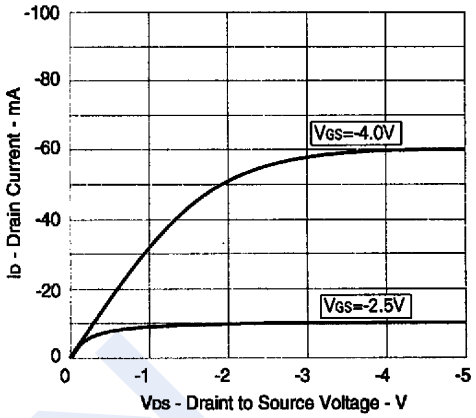
■ Typical Characterisitics

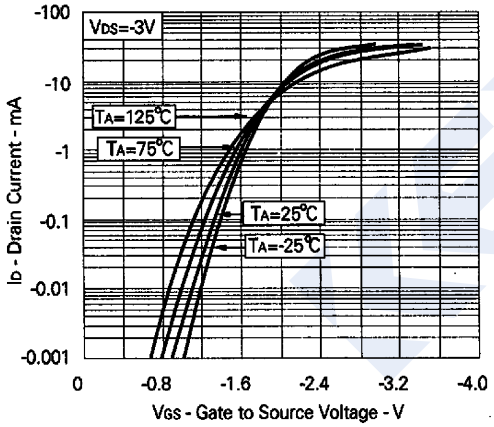
DERATING FACTOR OF FORWARD BIAS SAFE OPERATING AREA



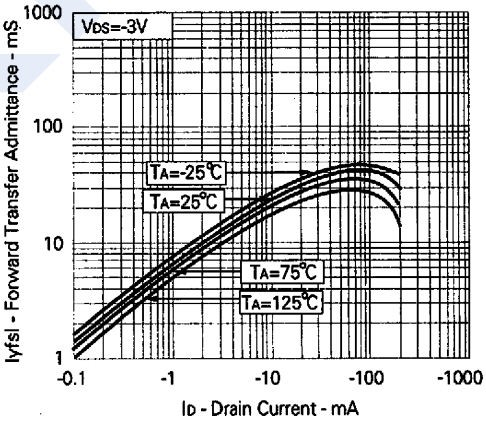
DRAIN CURRENT vs. DRAIN TO SOURCE VOLTAGE



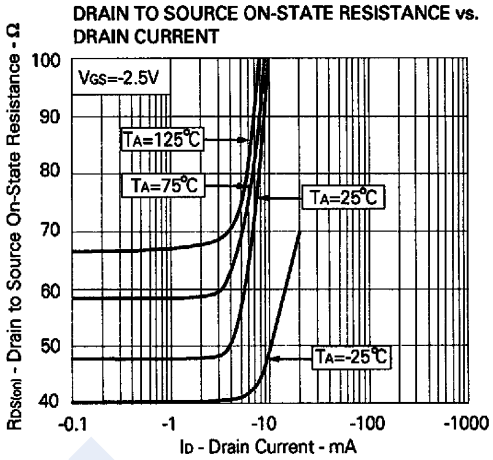
TRANSFER CHARACTERISTICS



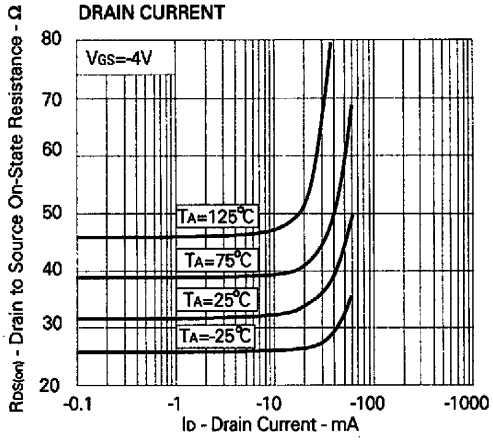
FORWARD TRANSFER ADMITTANCE vs. DRAIN CURRENT



DRAIN TO SOURCE ON-STATE RESISTANCE vs. DRAIN CURRENT



DRAIN TO SOURCE ON-STATE RESISTANCE vs. DRAIN CURRENT



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■ Typical Characterisitics