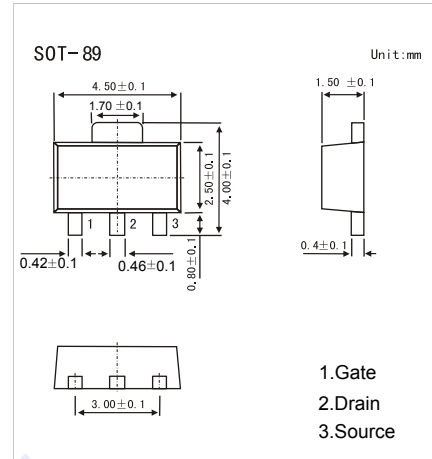
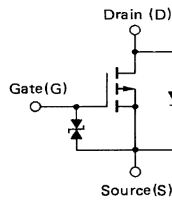


P-Channel MOSFET

2SJ205

■ Features

- V_{DS} (V) = -16V
- I_D = -0.5 A (V_{GS} = -10V)
- $R_{DS(ON)} < 3 \Omega$ (V_{GS} = -4V)
- $R_{DS(ON)} < 5 \Omega$ (V_{GS} = -2.5V)



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-16	V
Gate-Source Voltage	V_{GS}	± 16	
Continuous Drain Current	I_D	-0.5	A
Pulsed Drain Current (Note.1)	I_{DM}	-1	
Power Dissipation $T_c = 25^\circ\text{C}$	P_D	2	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Junction Storage Temperature Range	T_{stg}	-55 to 150	

Note.1: $PW \leq 10$ ms, duty cycle $\leq 50\%$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$I_D = -250 \mu\text{A}$, $V_{GS} = 0\text{V}$	-16			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -16\text{V}$, $V_{GS} = 0\text{V}$			-10	μA
Gate-Body leakage current	I_{GSS}	$V_{DS} = 0\text{V}$, $V_{GS} = \pm 16\text{V}$			± 5	μA
Gate to Source Cutoff Voltage	$V_{GS(off)}$	$V_{GS} = -5\text{V}$, $I_D = -10\mu\text{A}$	-1.4		-2.4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = -4\text{V}$, $I_D = -0.3\text{A}$			3	Ω
		$V_{GS} = -2.5\text{V}$, $I_D = -10\text{mA}$			5	
Forward Transconductance	g_{FS}	$V_{DS} = -3\text{V}$, $I_D = -0.3\text{A}$	0.4	0.5		S
Input Capacitance	C_{iss}	$V_{GS} = 0\text{V}$, $V_{DS} = -3\text{V}$, $f = 1\text{MHz}$		105		pF
Output Capacitance	C_{oss}			90		
Reverse Transfer Capacitance	C_{rss}			15		
Turn-On DelayTime	$t_{d(on)}$			185		
Turn-On Rise Time	t_r	$V_{GS(on)} = -3\text{V}$, $I_D = -0.3\text{A}$, $R_L = 10 \Omega$, $R_G = 10 \Omega$, $V_{DD} = -3\text{V}$,		900		ns
Turn-Off DelayTime	$t_{d(off)}$			40		
Turn-Off Fall Time	t_f			135		

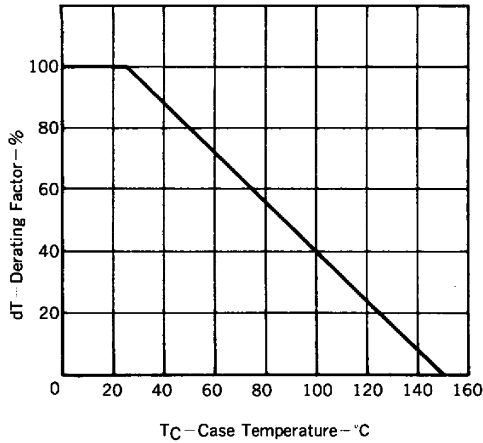
■ Marking

Marking	PD
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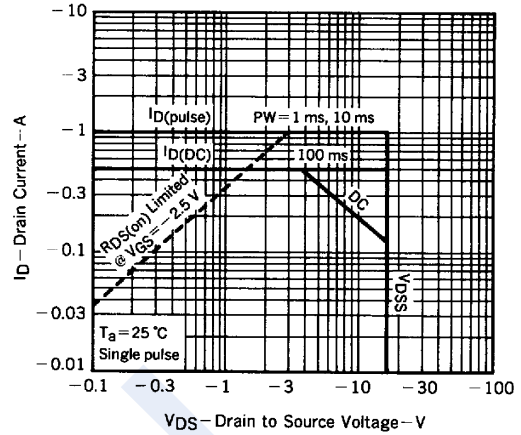
P-Channel MOSFET 2SJ205

■ Typical Characteristics

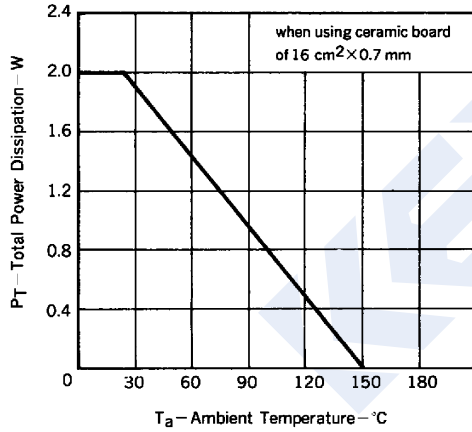
DERATING FACTOR OF FORWARD BIAS SAFE OPERATING AREA



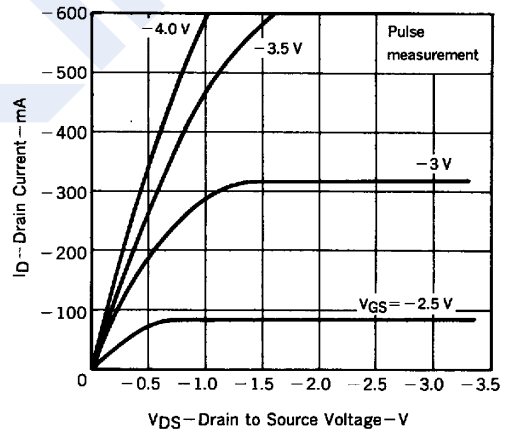
FORWARD BIAS SAFE OPERATING AREA



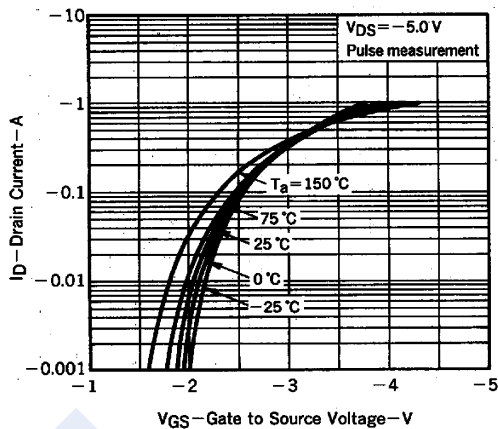
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



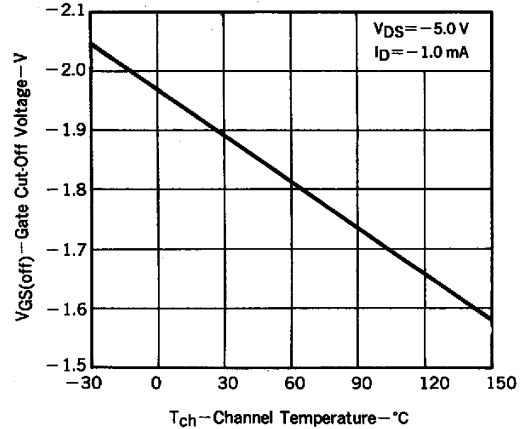
DRAIN CURRENT vs. DRAIN TO SOURCE VOLTAGE



TRANSFER CHARACTERISTICS

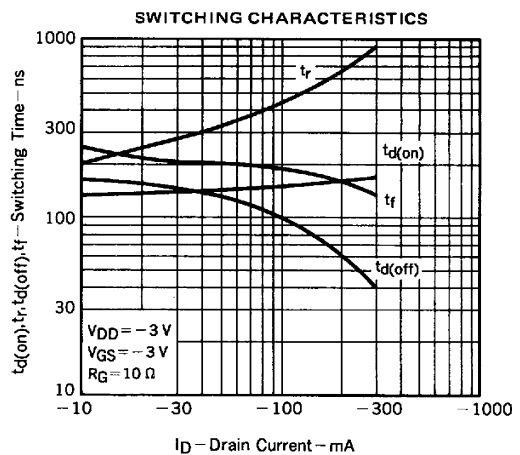
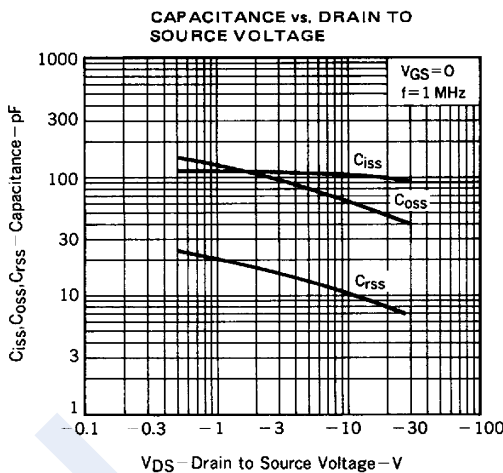
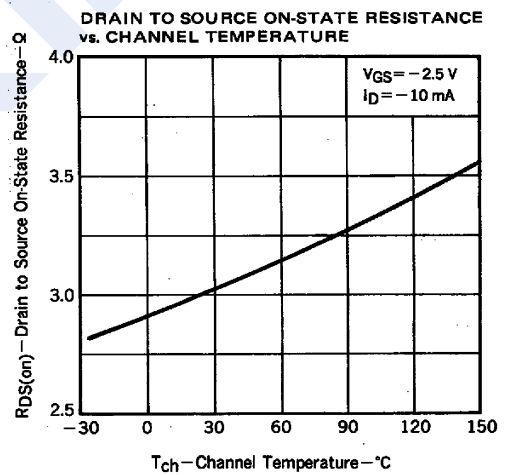
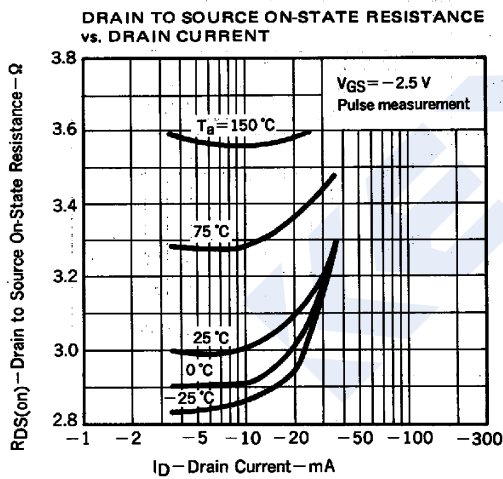
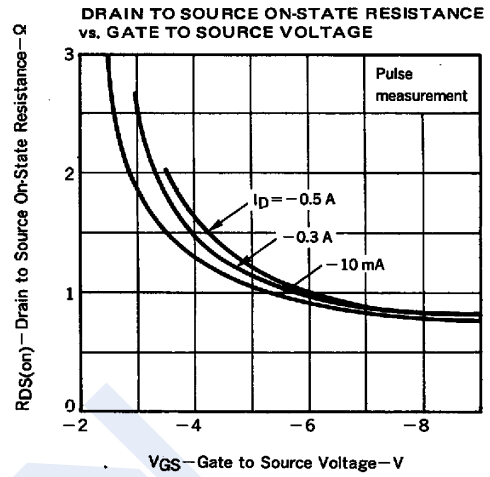
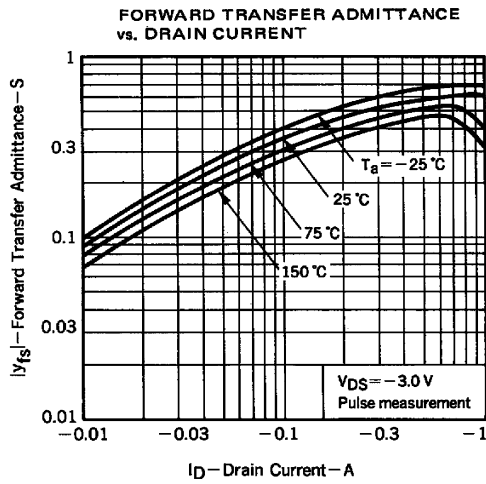


GATE TO SOURCE CUTOFF VOLTAGE vs. CHANNEL TEMPERATURE



P-Channel MOSFET 2SJ205

■ Typical Characteristics



P-Channel MOSFET

2SJ205

■ Typical Characteristics

