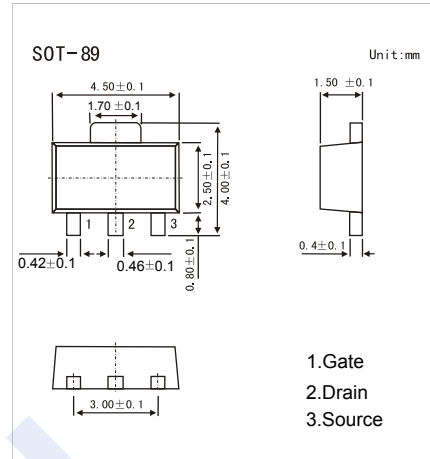


## P-Channel MOSFET

### 2SJ179

#### Features

- $V_{DS} (V) = -30V$
- $I_D = -1.5 A (V_{GS} = -10V)$
- $R_{DS(ON)} < 1 \Omega (V_{GS} = -10V)$
- $R_{DS(ON)} < 1.5 \Omega (V_{GS} = -4V)$



#### Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	-30	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	
Continuous Drain Current	$I_D$	-1.5	A
Pulsed Drain Current (Note.1)	$I_{DM}$	-3	
Power Dissipation	$P_D$	2	W
Junction Temperature	$T_J$	150	$^\circ C$
Junction Storage Temperature Range	$T_{stg}$	-55 to 150	

Note.1:  $PW \leq 10ms, Duty Cycle \leq 50\%$

#### Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$V_{DSS}$	$I_D = -250 \mu A, V_{GS} = 0V$	-30			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = -30V, V_{GS} = 0V$			-10	$\mu A$
Gate-Body leakage current	$I_{GSS}$	$V_{DS} = 0V, V_{GS} = \pm 20V$			$\pm 100$	nA
Gate Cut off Voltage	$V_{GS(off)}$	$V_{DS} = -10V, I_D = -1mA$	-1		-3	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = -4V, I_D = -500mA$			1.5	$\Omega$
		$V_{GS} = -10V, I_D = -500mA$			1	
Forward Transconductance	$g_{FS}$	$V_{DS} = -10V, I_D = -500mA$	0.4			S
Input Capacitance	$C_{iss}$	$V_{GS} = 0V, V_{DS} = -10V, f = 1MHz$		210		pF
Output Capacitance	$C_{oss}$			130		
Reverse Transfer Capacitance	$C_{rss}$			3		
Turn-On Delay Time	$t_{d(on)}$	$V_{GS(on)} = -10V, V_{DS} = -25V, I_D = -0.5A, R_L = 50 \Omega, R_{GEN} = 10 \Omega$		35		ns
Turn-On Rise Time	$t_r$			70		
Turn-Off Delay Time	$t_{d(off)}$			380		
Turn-Off Fall Time	$t_f$			200		

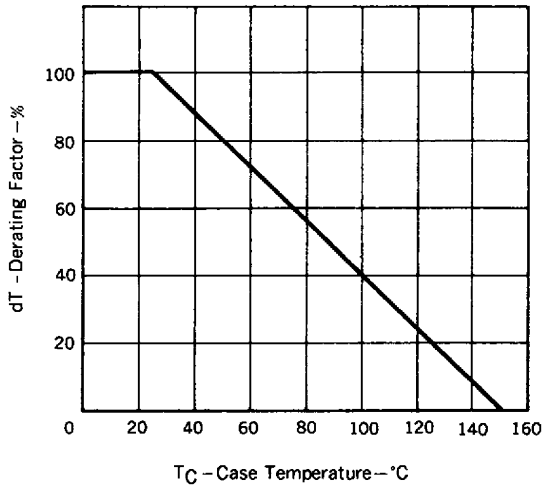
#### Marking

Marking	PA
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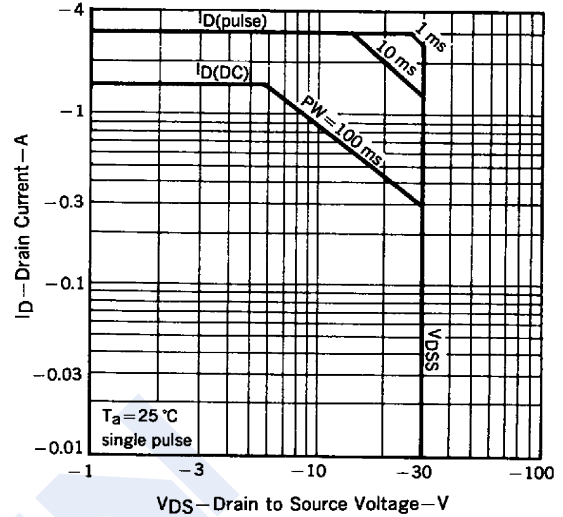
## P-Channel MOSFET 2SJ179

■ Typical Characteristics

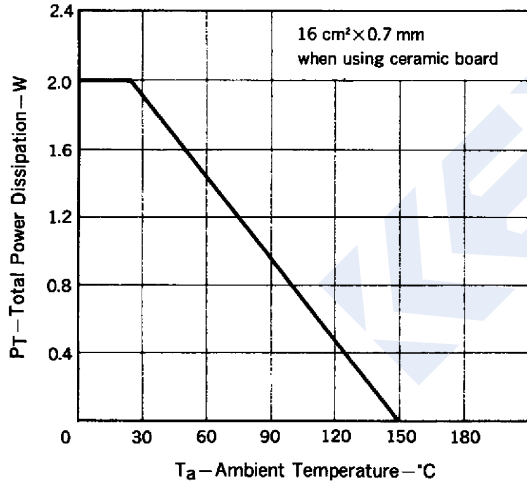
DERATING FACTOR OF FORWARD BIAS SAFE OPERATING AREA



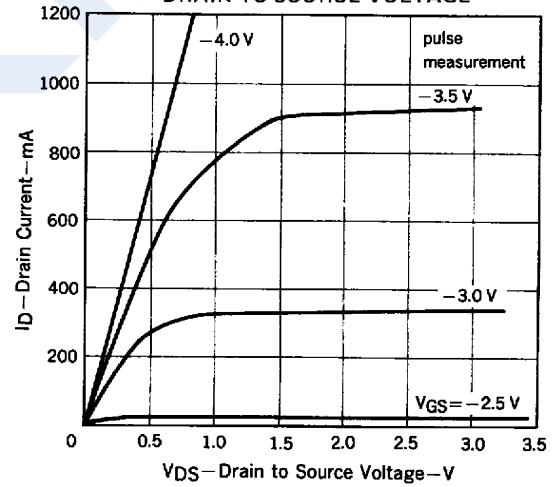
FORWARD BIAS SAFE OPERATING AREA



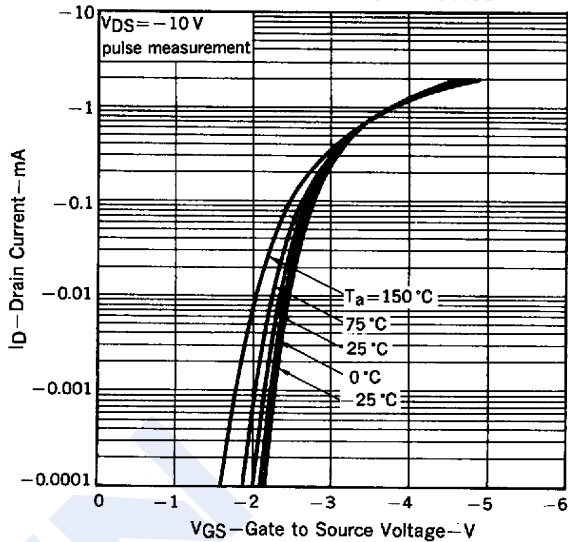
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



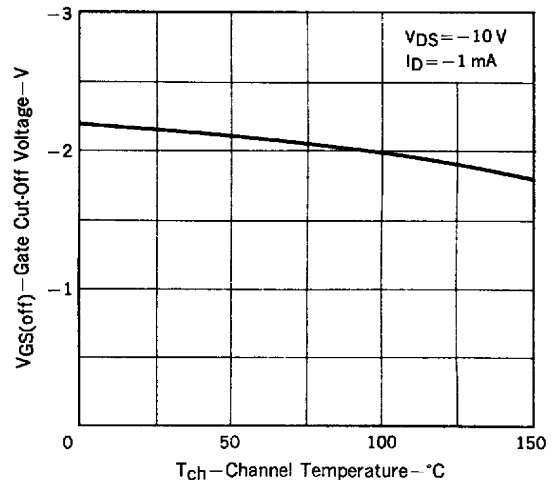
DRAIN CURRENT vs. DRAIN TO SOURCE VOLTAGE



TRANSFER CHARACTERISTICS



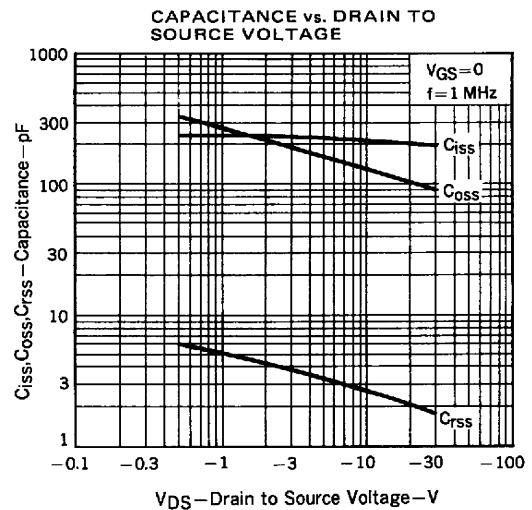
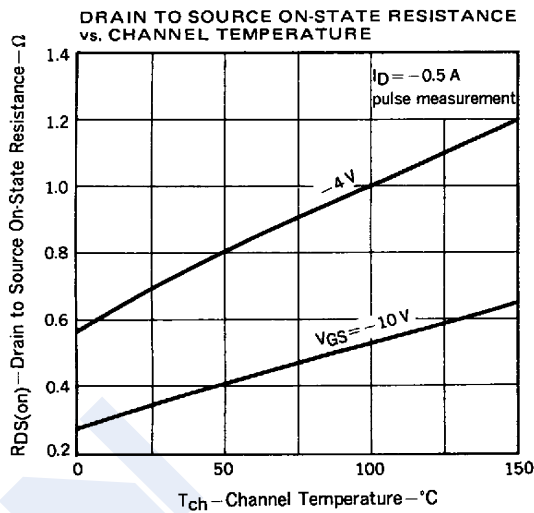
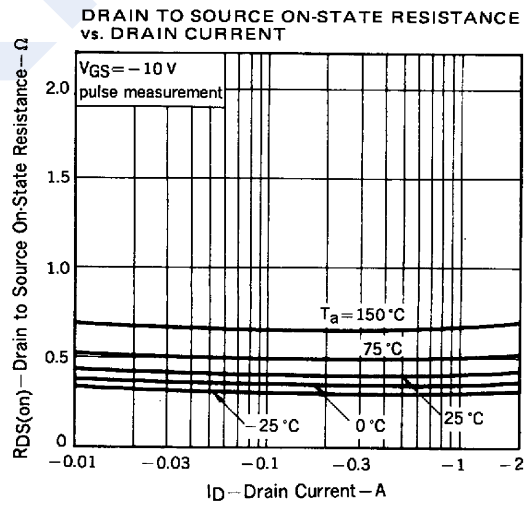
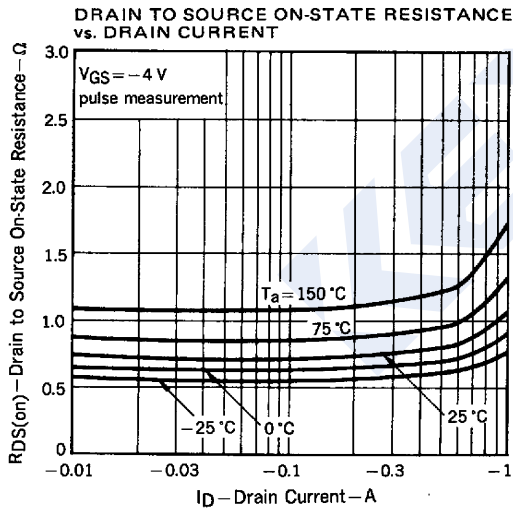
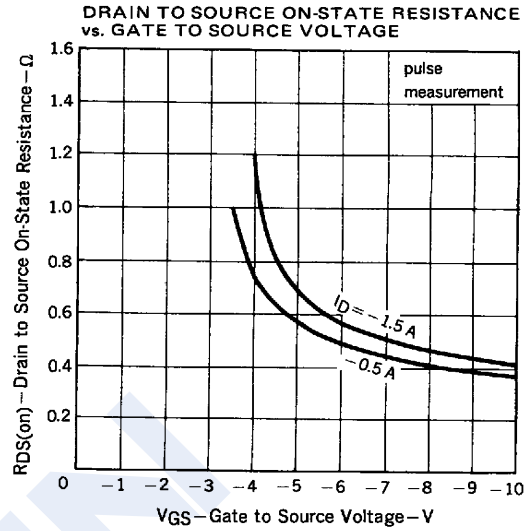
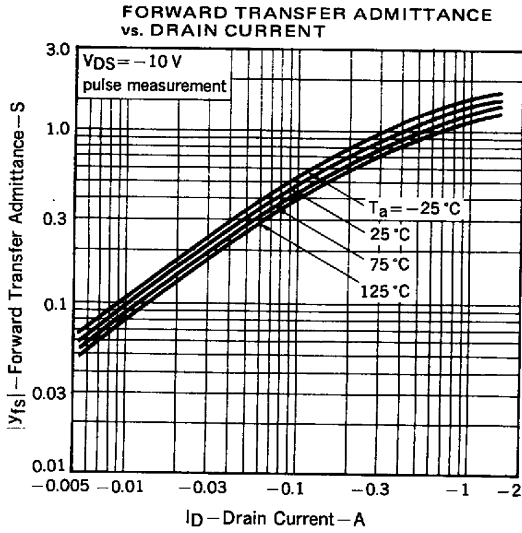
GATE TO SOURCE CUTOFF VOLTAGE vs. CHANNEL TEMPERATURE



# P-Channel MOSFET

## 2SJ179

■ Typical Characteristics



## P-Channel MOSFET

### 2SJ179

#### ■ Typical Characteristics

