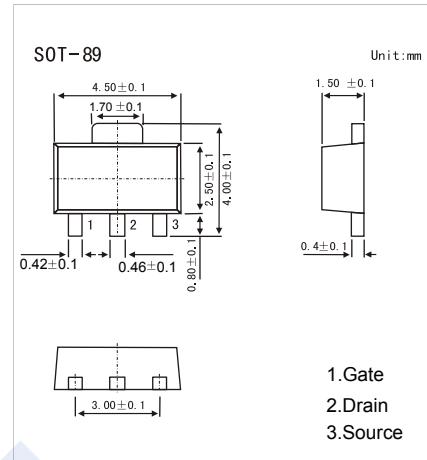
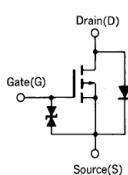


## P-Channel MOSFET

### 2SJ197

#### ■ Features

- $V_{DS}$  (V) = -60V
- $I_D$  = -1.5 A
- $R_{DS(ON)} < 1 \Omega$  ( $V_{GS} = -10V$ )
- $R_{DS(ON)} < 1.5 \Omega$  ( $V_{GS} = -4V$ )
- Complementary to 2SK1483



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	-60	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	$^\circ\text{C}$
Junction Storage Temperature Range	$T_{stg}$	-55 to 150	

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

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$V_{DSS}$	$I_D = -250 \mu\text{A}$ , $V_{GS} = 0V$	-60			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = -60V$ , $V_{GS} = 0V$			-10	$\mu\text{A}$
Gate-Body leakage current	$I_{GSS}$	$V_{DS} = 0V$ , $V_{GS} = \pm 20V$			$\pm 10$	$\mu\text{A}$
Gate Cut off Voltage	$V_{GS(off)}$	$V_{DS} = -10V$ , $I_D = -1mA$	-1		-3	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS} = -10V$ , $I_D = -0.5A$			1.5	$\Omega$
		$V_{GS} = -4V$ , $I_D = -0.5A$			1	
Forward Transconductance	$g_{FS}$	$V_{GS} = -10V$ , $I_D = -0.5A$	0.4	1		S
Input Capacitance	$C_{iss}$	$V_{GS} = 0V$ , $V_{DS} = -10V$ , $f = 1\text{MHz}$		220		pF
Output Capacitance	$C_{oss}$			125		
Reverse Transfer Capacitance	$C_{rss}$			17		
Turn-On Delay Time	$t_{d(on)}$	$V_{GS(on)} = -10V$ , $V_{DS} = -25V$ , $I_D = -0.5A$ , $R_L = 50 \Omega$ , $R_{GEN} = 10 \Omega$		45		ns
Turn-On Rise Time	$t_r$			70		
Turn-Off Delay Time	$t_{d(off)}$			380		
Turn-Off Fall Time	$t_f$			170		

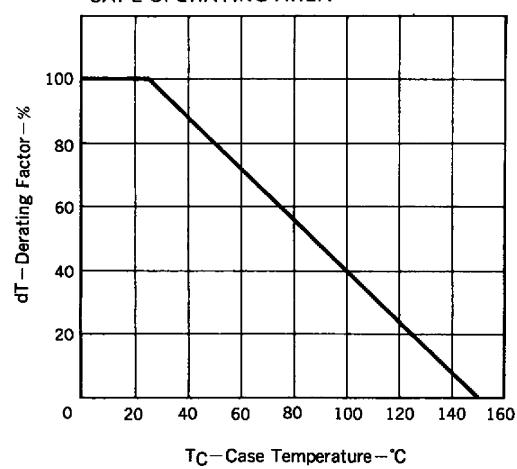
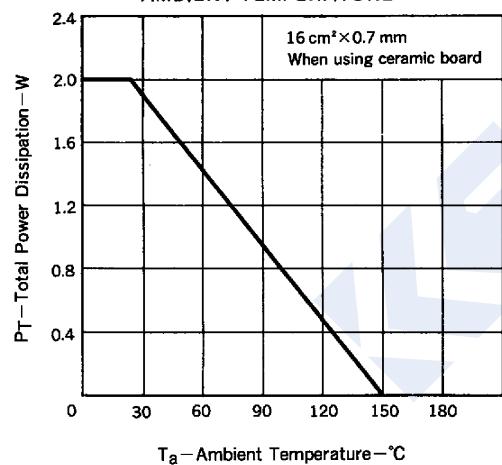
#### ■ Marking

Marking	PB
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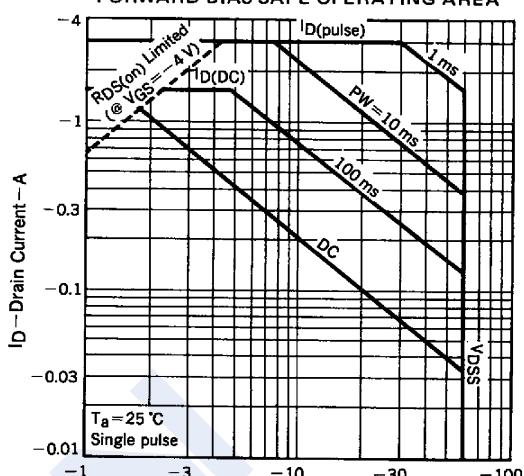
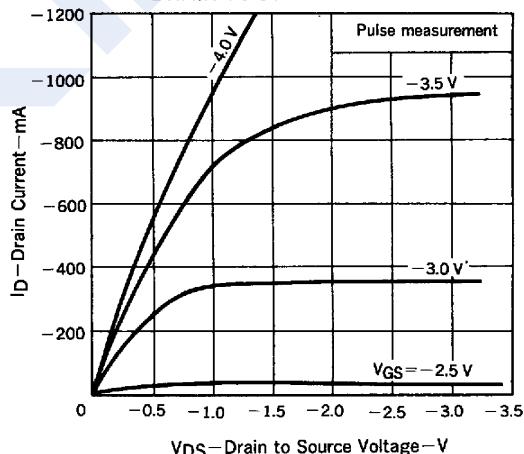
## P-Channel MOSFET

2SJ197

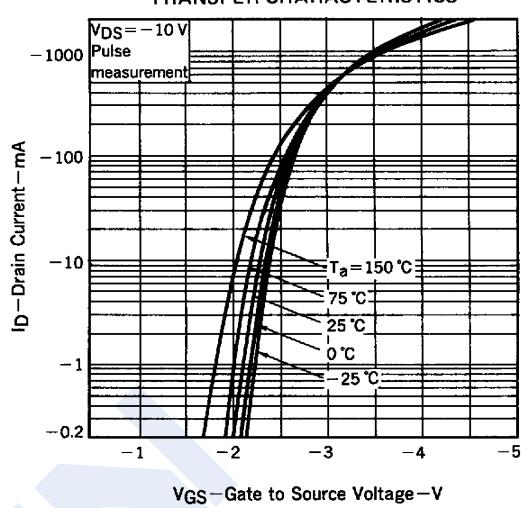
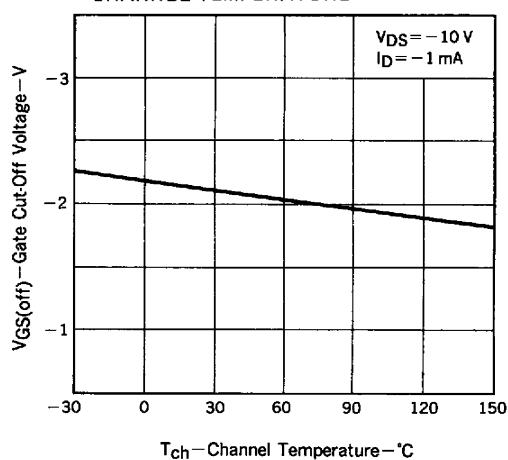
## ■ Typical Characteristics

DERATING FACTOR OF FORWARD BIAS  
SAFE OPERATING AREATOTAL POWER DISSIPATION vs.  
AMBIENT TEMPERATURE

FORWARD BIAS SAFE OPERATING AREA

V<sub>DS</sub> - Drain to Source Voltage - VDRAIN CURRENT vs.  
DRAIN TO SOURCE VOLTAGEV<sub>DS</sub> - Drain to Source Voltage - V

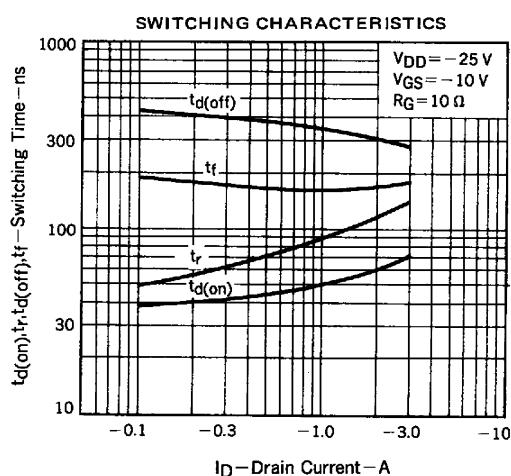
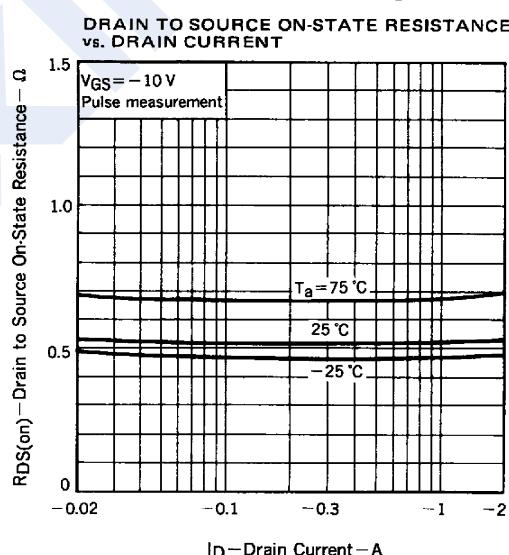
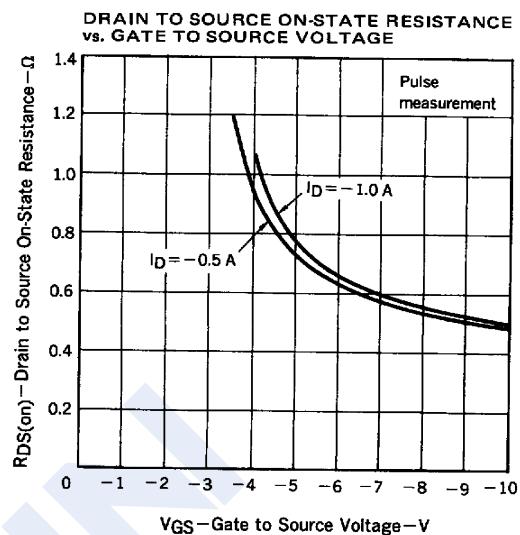
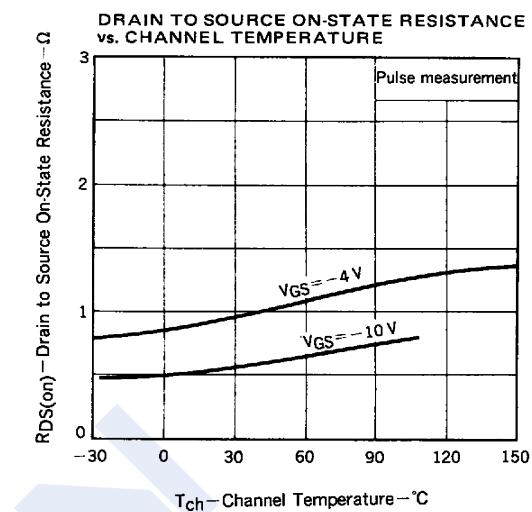
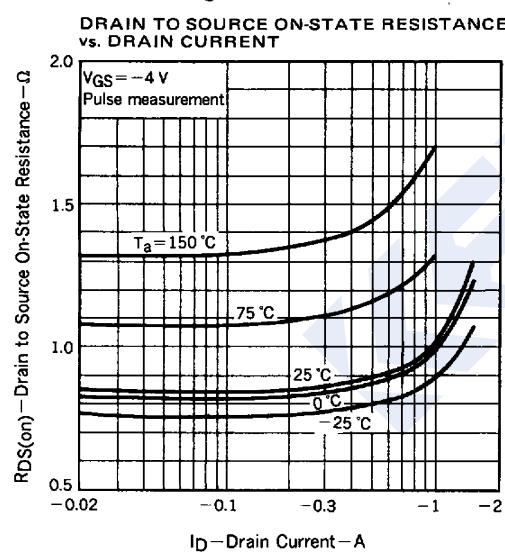
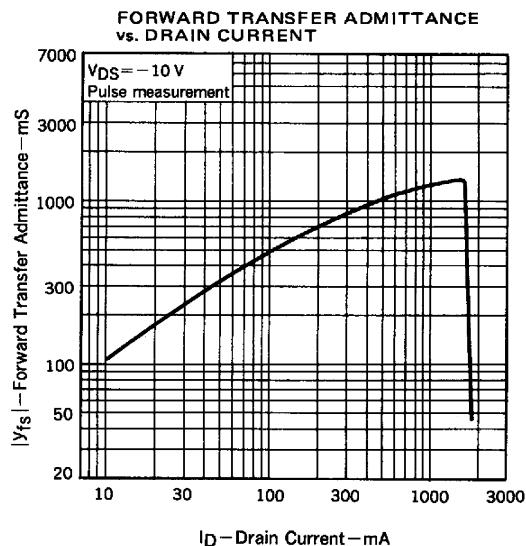
TRANSFER CHARACTERISTICS

GATE TO SOURCE CUTOFF VOLTAGE vs.  
CHANNEL TEMPERATURE

## P-Channel MOSFET

### 2SJ197

#### ■ Typical Characteristics



**P-Channel MOSFET**  
**2SJ197**

■ Typical Characteristics

