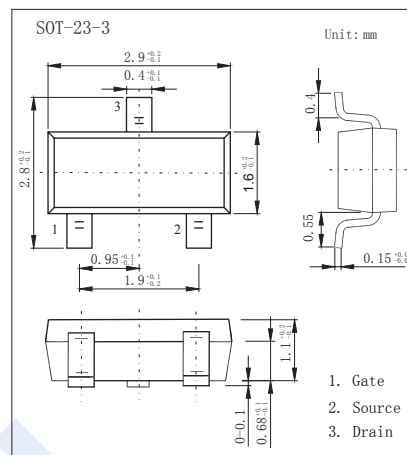
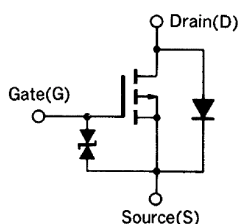


P-Channel MOSFET

2SJ185

Features

- $V_{DS} (V) = -50V$
- $I_D = -0.1 A$ ($V_{GS} = -4V$)
- $R_{DS(ON)} < 20 \Omega$ ($V_{GS} = -4V$)
- $R_{DS(ON)} < 40 \Omega$ ($V_{GS} = -2.5V$)
- Complementary to 2SK1399



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-50	V
Gate-Source Voltage	V_{GS}	± 7	
Continuous Drain Current	I_D	-100	mA
Pulsed Drain Current (Note.1)	I_{DM}	-200	
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	150	$^\circ C$
Operating Temperature	T_{opt}	-55 to 80	
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}	$I_D = -250 \mu A$, $V_{GS} = 0V$	-50			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -50V$, $V_{GS} = 0V$			-10	μA
Gate-Body leakage current	I_{GSS}	$V_{DS} = 0V$, $V_{GS} = \pm 7V$			± 5	μA
Gate Cut off Voltage	$V_{GS(off)}$	$V_{DS} = -3V$, $I_D = -1 \mu A$	-1.2		-2	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = -2.5V$, $I_D = -1mA$			40	Ω
		$V_{GS} = -4V$, $I_D = -10mA$			20	
Forward Transconductance	g_{FS}	$V_{DS} = -3V$, $I_D = -10mA$	20	42		mS
Input Capacitance	C_{iss}	$V_{GS} = 0V$, $V_{DS} = -3V$, $f = 1MHz$		22		pF
Output Capacitance	C_{oss}			12		
Reverse Transfer Capacitance	C_{rss}			4		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS(on)} = -3V$, $V_{DS} = -3V$, $I_D = -20mA$, $R_L = 150 \Omega$, $R_{GEN} = 10 \Omega$		80		ns
Turn-On Rise Time	t_r			230		
Turn-Off DelayTime	$t_{d(off)}$			40		
Turn-Off Fall Time	t_f			70		

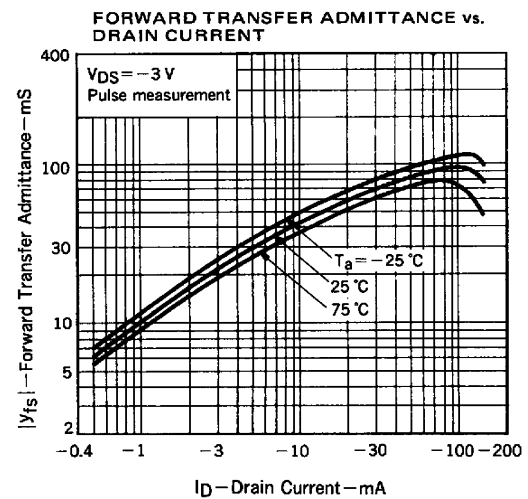
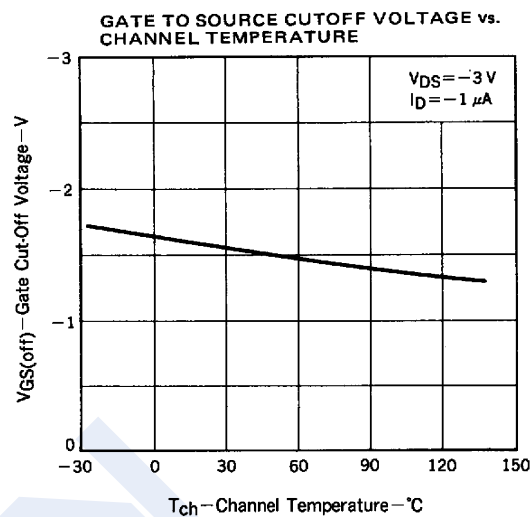
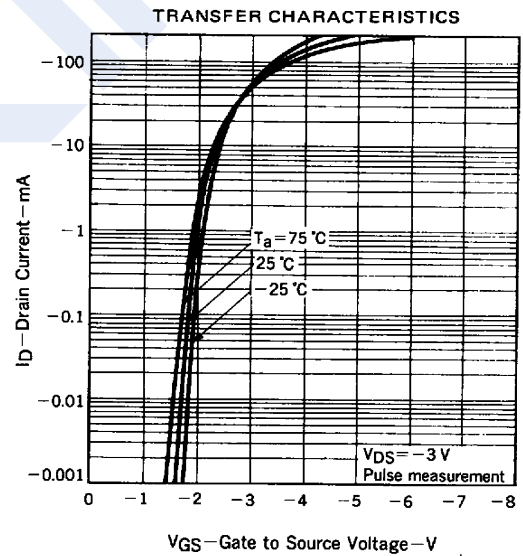
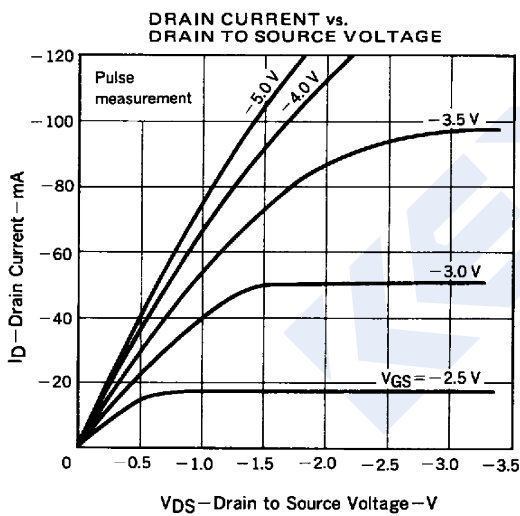
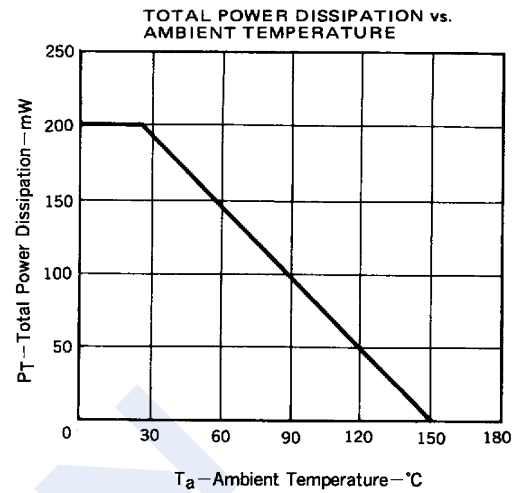
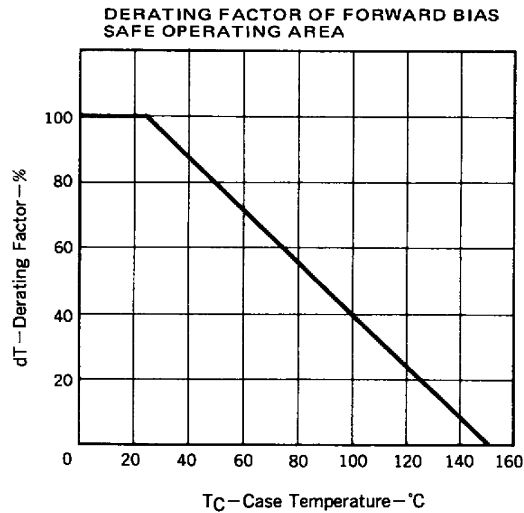
Marking

Marking	H12
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P-Channel MOSFET

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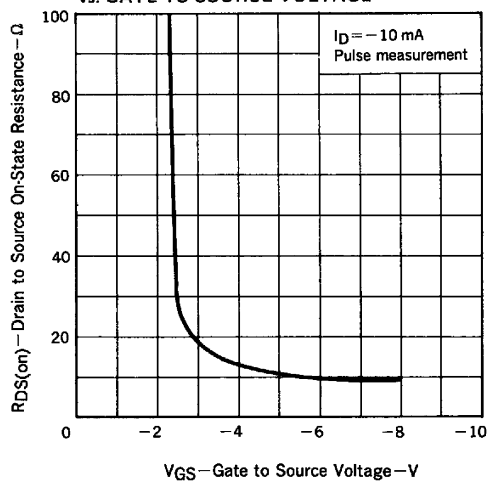
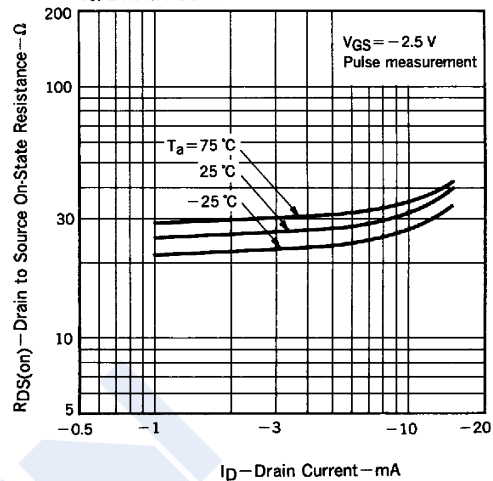
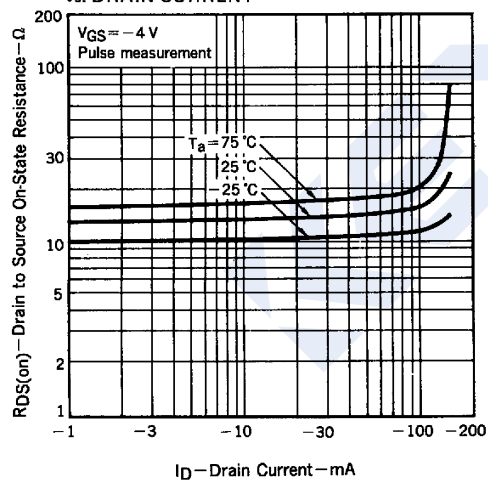
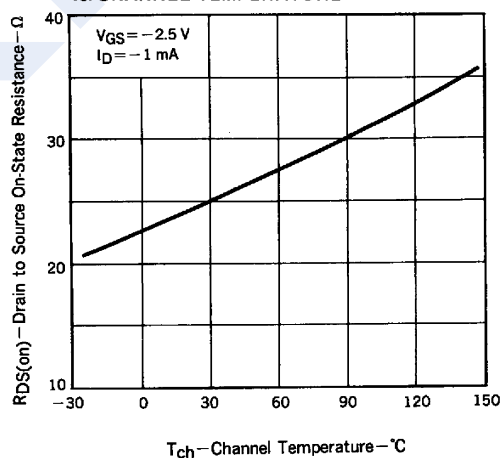
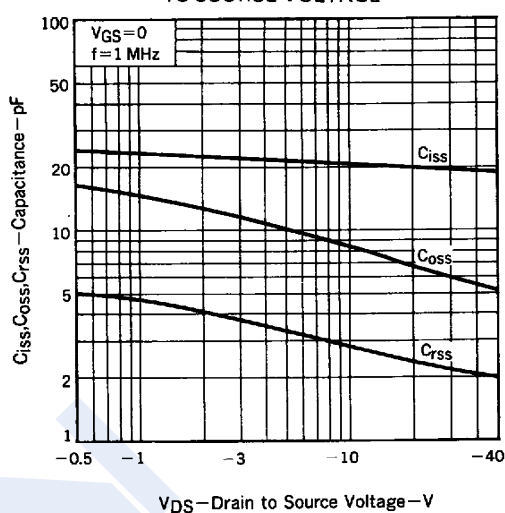
■ Typical Characteristics



P-Channel MOSFET

2SJ185

■ Typical Characteristics

DRAIN TO SOURCE ON-STATE RESISTANCE
vs. GATE TO SOURCE VOLTAGEDRAIN TO SOURCE ON-STATE RESISTANCE
vs. DRAIN CURRENTDRAIN TO SOURCE ON-STATE RESISTANCE
vs. DRAIN CURRENTDRAIN TO SOURCE ON-STATE RESISTANCE
vs. CHANNEL TEMPERATURECAPACITANCE vs. DRAIN
TO SOURCE VOLTAGE

SWITCHING CHARACTERISTICS

