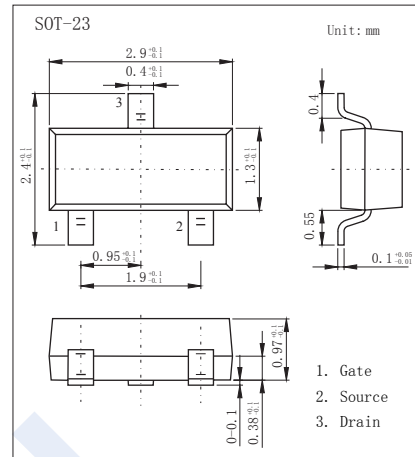
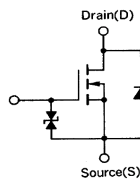


N-Channel MOSFET

2SK1589

■ Features

- $V_{DS} (V) = 100V$
- $I_D = 0.1 A$
- $R_{DS(ON)} < 30 \Omega$ ($V_{GS} = 4V$)
- $R_{DS(ON)} < 25 \Omega$ ($V_{GS} = 10V$)



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 20	
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	$^\circ C$
Storage Temperature Range	T_{stg}	-55 to 150	

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

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

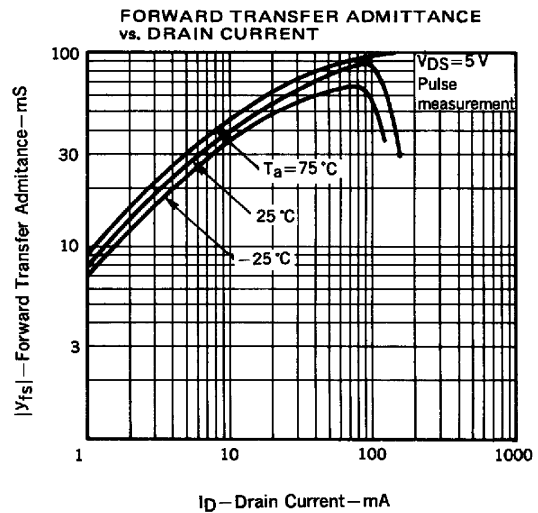
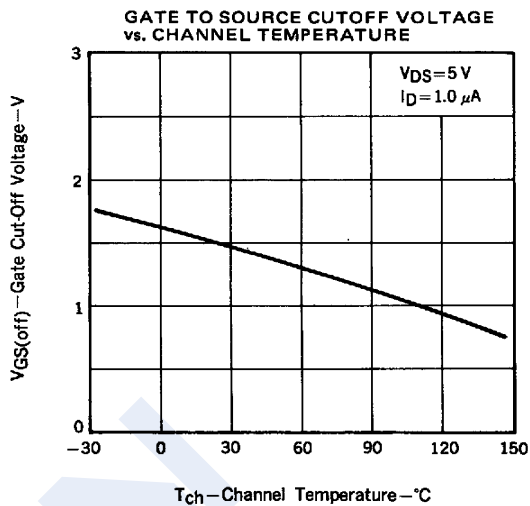
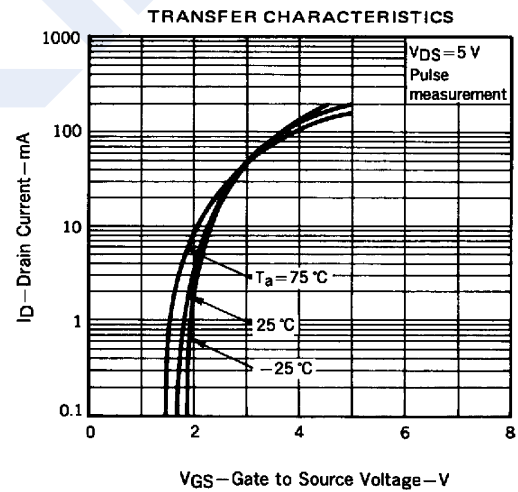
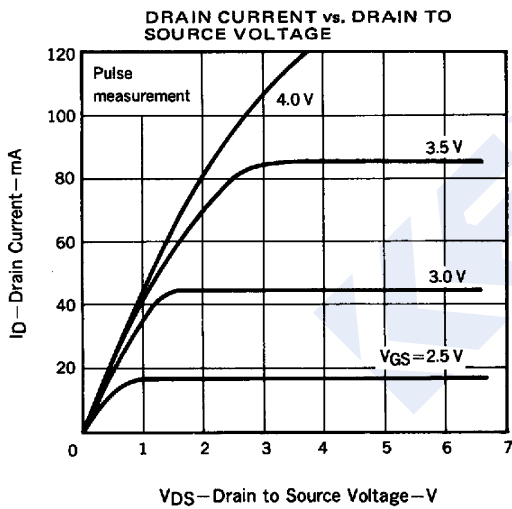
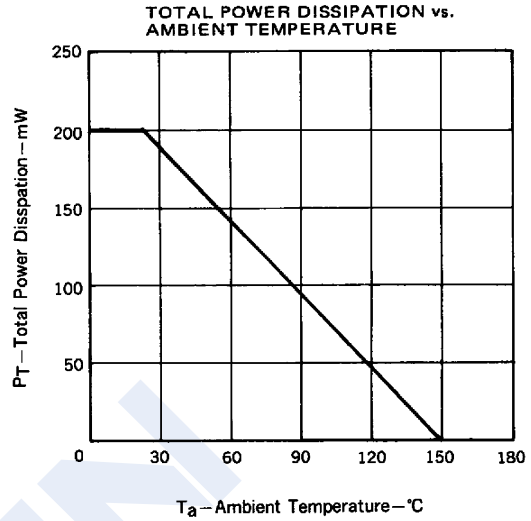
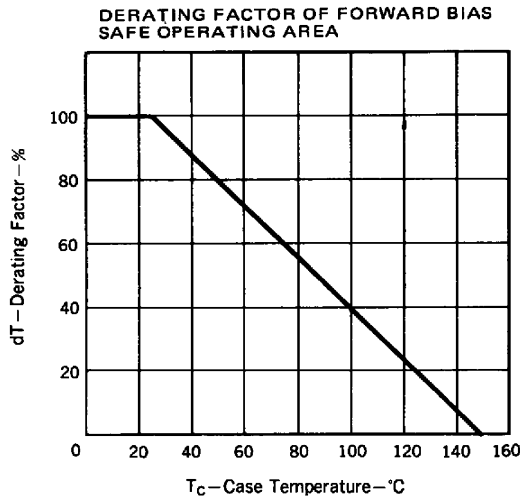
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$I_D=250 \mu A$, $V_{GS}=0V$	100			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=100V$, $V_{GS}=0V$			1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{DS}=0V$, $V_{GS}=\pm 20V$			± 1	μA
Gate Cut-off Voltage	$V_{GS(off)}$	$V_{DS}=5V$, $I_D=1\mu A$	0.8		1.8	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=4V$, $I_D=10m A$			30	Ω
		$V_{GS}=10V$, $I_D=10m A$			25	
Forward Transconductance	g_{FS}	$V_{DS}=5V$, $I_D=10m A$	20	38		mS
Input Capacitance	C_{iss}	$V_{GS}=0V$, $V_{DS}=5V$, $f=1MHz$		16		pF
Output Capacitance	C_{oss}			12		
Reverse Transfer Capacitance	C_{rss}			3		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS(on)}=5V$, $V_{DS}=5V$, $I_D=10mA$, $R_L=500 \Omega$, $R_G=10 \Omega$		17		ns
Turn-On Rise Time	t_r			10		
Turn-Off DelayTime	$t_{d(off)}$			68		
Turn-Off Fall Time	t_f			38		

■ Marking

Marking	G17
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N-Channel MOSFET 2SK1589

■ Typical Characteristics



N-Channel MOSFET 2SK1589

■ Typical Characteristics

