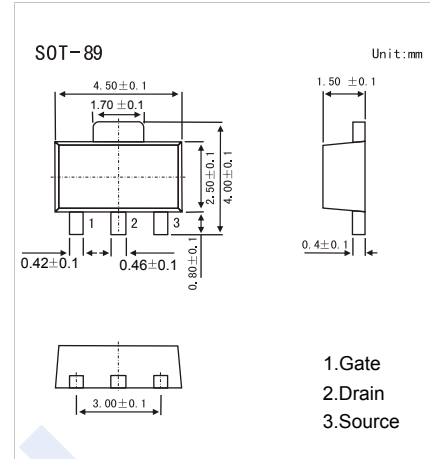
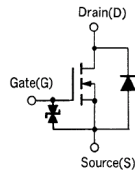


N-Channel MOSFET

2SK1592

■ Features

- V_{DS} (V) = 60V
- I_D = 0.5A
- $R_{DS(ON)} < 2.5 \Omega$ ($V_{GS} = 4V$)
- $R_{DS(ON)} < 2 \Omega$ ($V_{GS} = 10V$)



■ 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}	± 20	
Continuous Drain Current	I_D	0.5	A
Pulsed Drain Current (Note.1)	I_{DM}	1	
Power Dissipation	P_D	2	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150	

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

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

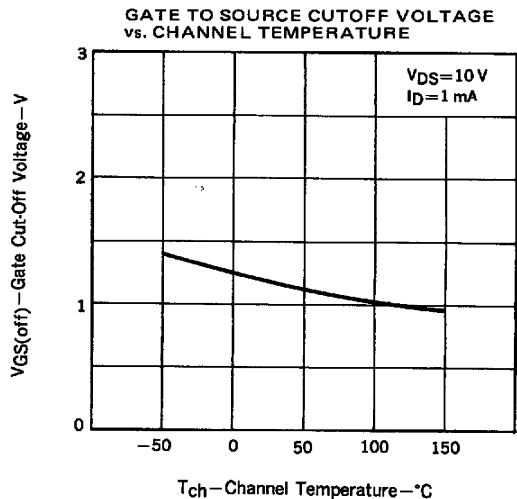
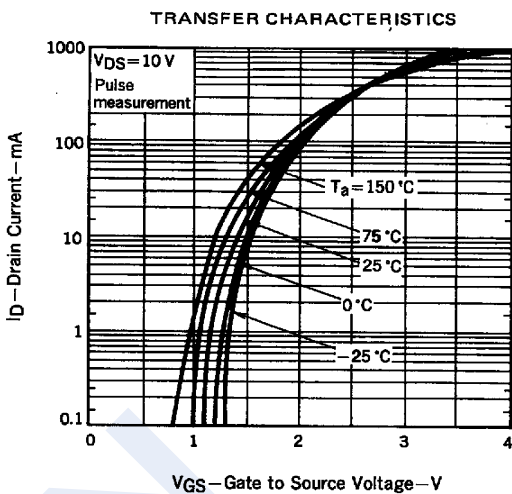
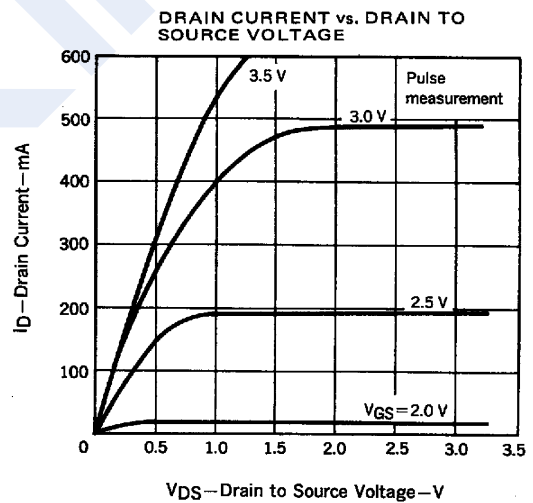
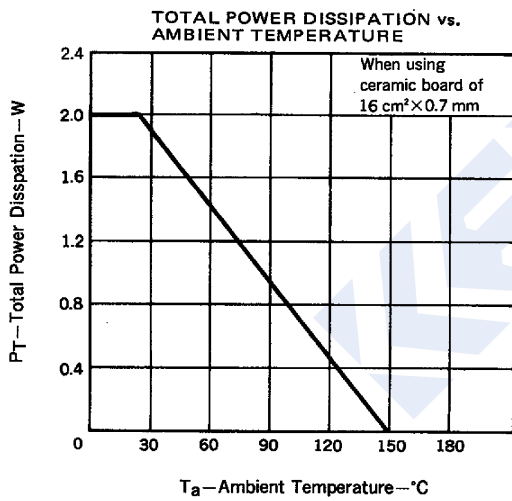
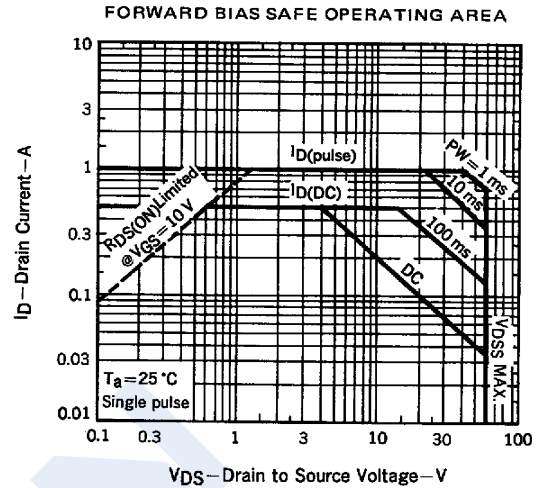
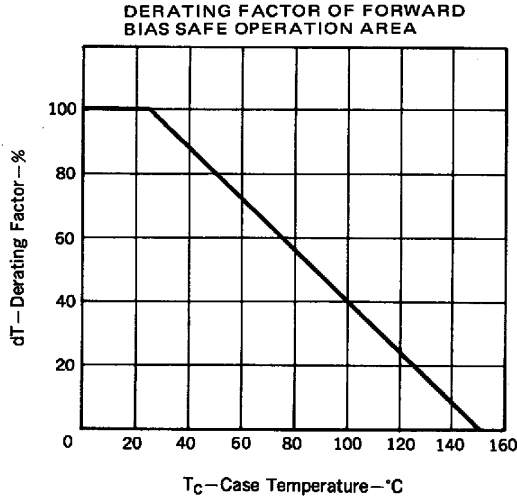
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$I_D=250 \mu\text{A}$, $V_{GS}=0\text{V}$	60			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=60\text{V}$, $V_{GS}=0\text{V}$			10	μA
Gate-Body Leakage Current	I_{GSS}	$V_{DS}=0\text{V}$, $V_{GS}=\pm 20\text{V}$			± 10	μA
Gate Cut-off Voltage	$V_{GS(off)}$	$V_{DS}=10\text{V}$, $I_D=1\text{mA}$	0.8		2	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=4\text{V}$, $I_D=0.3\text{A}$			2.5	Ω
		$V_{GS}=10\text{V}$, $I_D=0.3\text{A}$			2	
Forward Transconductance	g_{FS}	$V_{DS}=10\text{V}$, $I_D=0.5\text{A}$	400	570		mS
Input Capacitance	C_{iss}	$V_{GS}=0\text{V}$, $V_{DS}=10\text{V}$, $f=1\text{MHz}$		52		pF
Output Capacitance	C_{oss}			34		
Reverse Transfer Capacitance	C_{rss}			7		
Turn-On DelayTime	$t_{d(on)}$			60		
Turn-On Rise Time	t_r	$V_{GS(on)}=4\text{V}$, $V_{DS}=10\text{V}$, $I_D=0.3\text{A}$, $R_L=33 \Omega$, $R_G=10 \Omega$		150		
Turn-Off DelayTime	$t_{d(off)}$			150		
Turn-Off Fall Time	t_f			100		

■ Marking

Marking	NO
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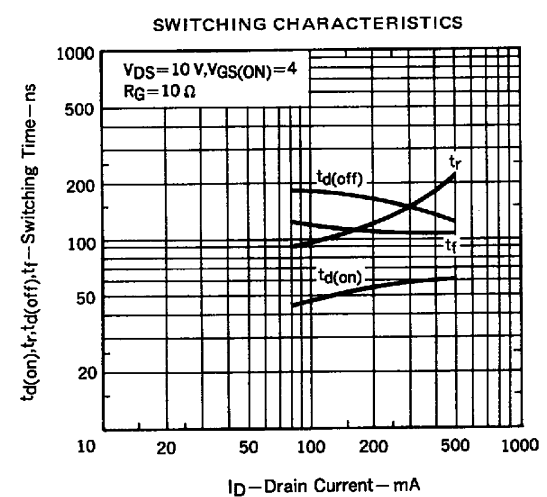
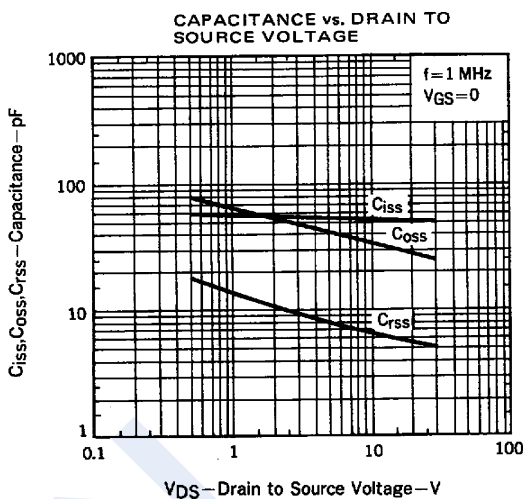
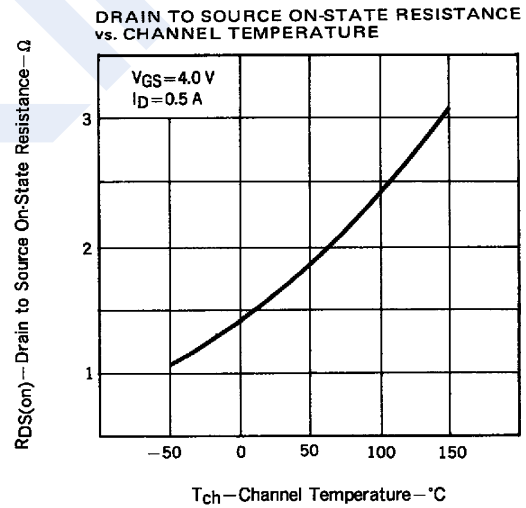
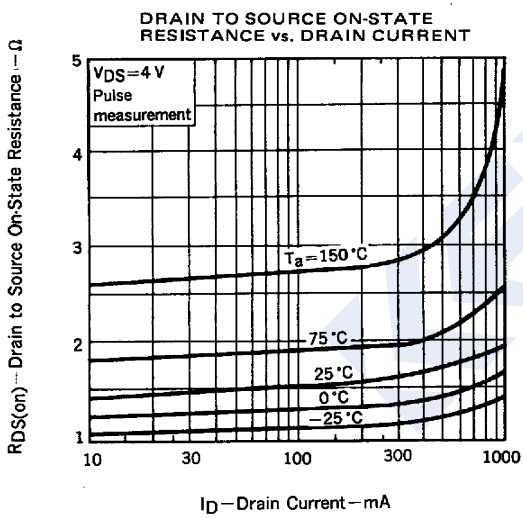
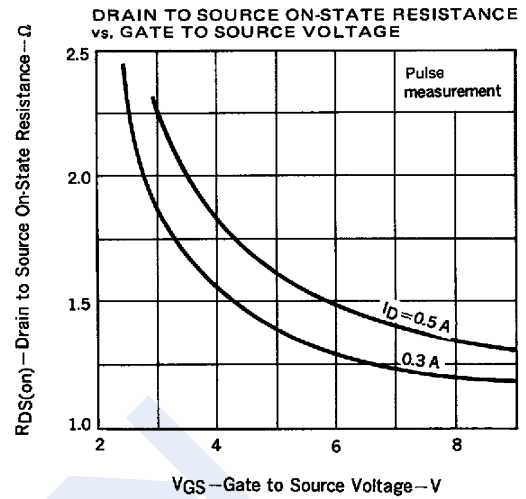
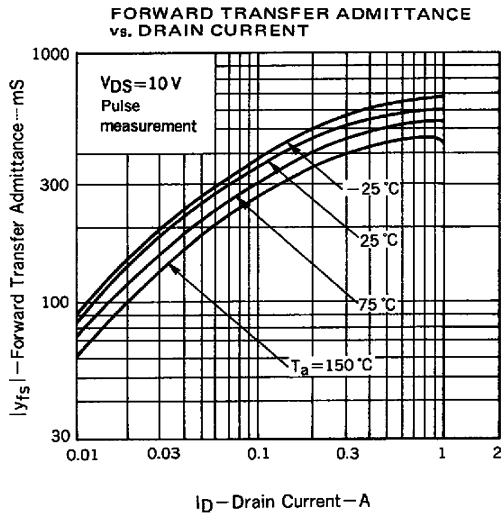
N-Channel MOSFET 2SK1592

■ Typical Characteristics



N-Channel MOSFET 2SK1592

Typical Characteristics



N-Channel MOSFET 2SK1592

■ Typical Characteristics

