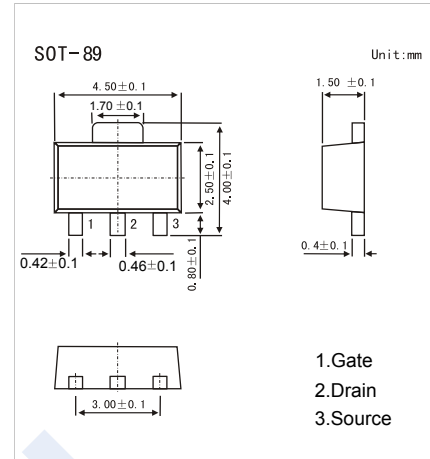
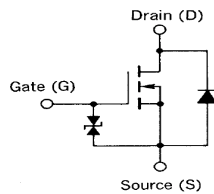


N-Channel MOSFET

2SK1583

■ Features

- V_{DS} (V) = 16V
- I_D = 0.5 A
- $R_{DS(ON)} < 2 \Omega$ ($V_{GS} = 2.5V$)
- $R_{DS(ON)} < 1.5 \Omega$ ($V_{GS} = 4V$)



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	16	V
Gate-Source Voltage	V_{GS}	± 16	
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	$^\circ\text{C}$
Operating Temperature	T_{opt}	-55 to 80	
Storage Temperature Range	T_{stg}	-55 to 150	

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

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

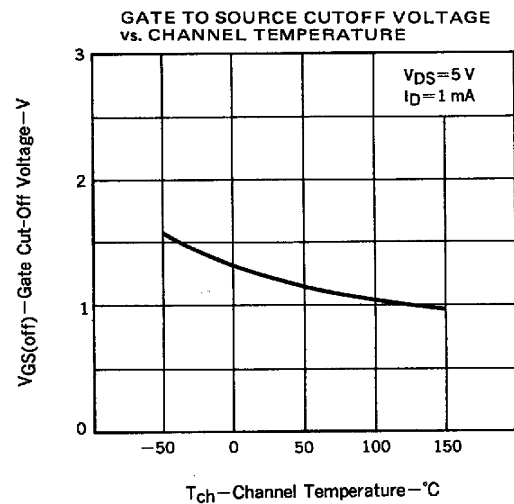
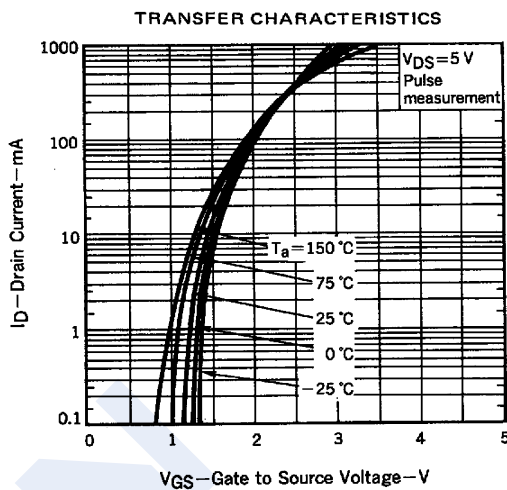
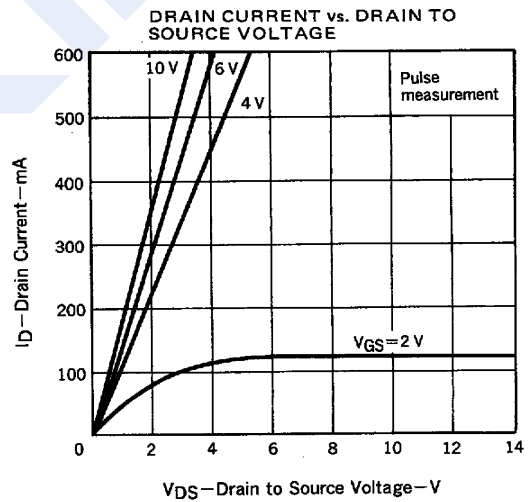
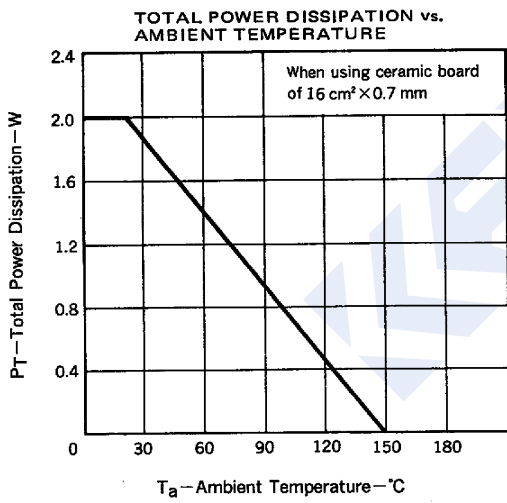
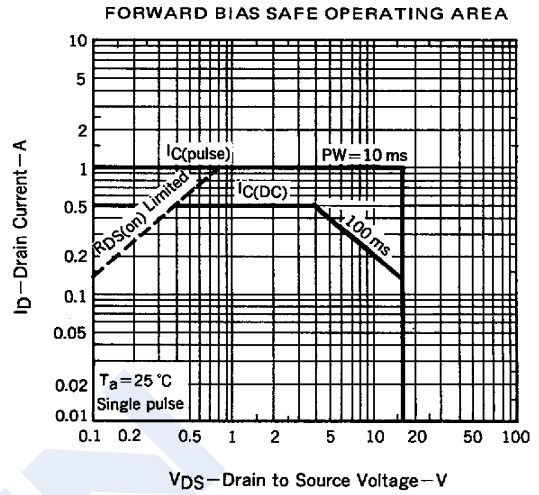
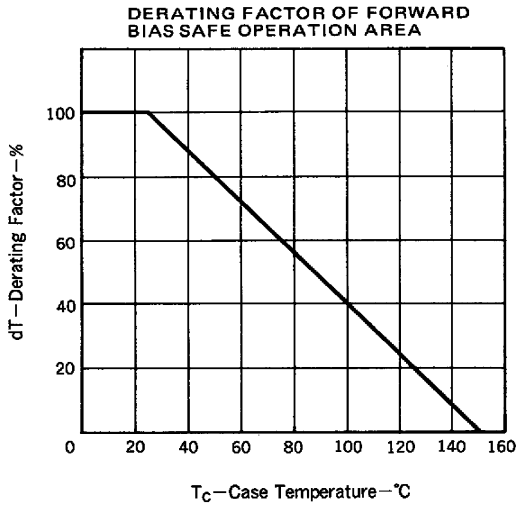
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$I_D = 250 \mu\text{A}$, $V_{GS} = 0V$	16			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 16V$, $V_{GS} = 0V$			1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{DS} = 0V$, $V_{GS} = \pm 16V$			± 5	μA
Gate Cut-off Voltage	$V_{GS(off)}$	$V_{DS} = 5V$, $I_D = 1\text{mA}$	0.8		1.6	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = 2.5V$, $I_D = 300\text{mA}$			2	Ω
		$V_{GS} = 4V$, $I_D = 300\text{mA}$			1.5	
Forward Transconductance	g_{FS}	$V_{DS} = 5V$, $I_D = 300\text{mA}$	400	550		mS
Input Capacitance	C_{iss}	$V_{GS} = 0V$, $V_{DS} = 5V$, $f = 1\text{MHz}$		60		pF
Output Capacitance	C_{oss}			70		
Reverse Transfer Capacitance	C_{rss}			15		
Turn-On Delay Time	$t_{d(on)}$				95	
Turn-On Rise Time	t_r	$V_{GS(on)} = 3V$, $V_{DS} = 10V$, $I_D = 0.3A$, $R_L = 33 \Omega$, $R_G = 10 \Omega$		360		
Turn-Off Delay Time	$t_{d(off)}$			160		
Turn-Off Fall Time	t_f			150		

■ Marking

Marking	ND

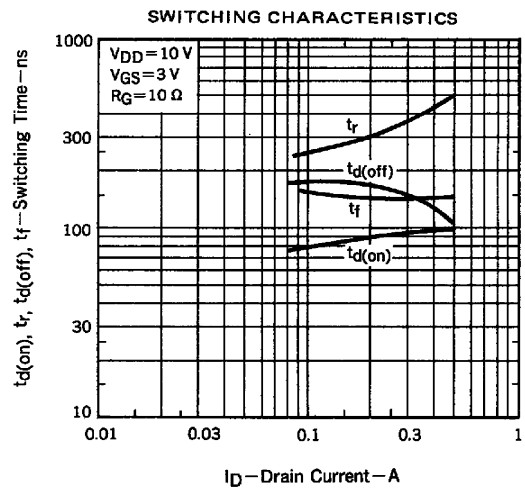
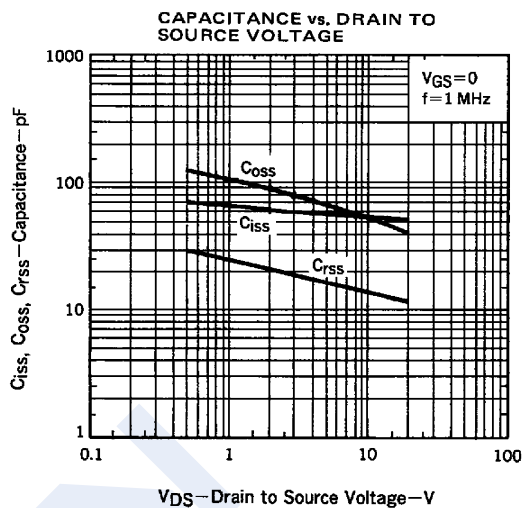
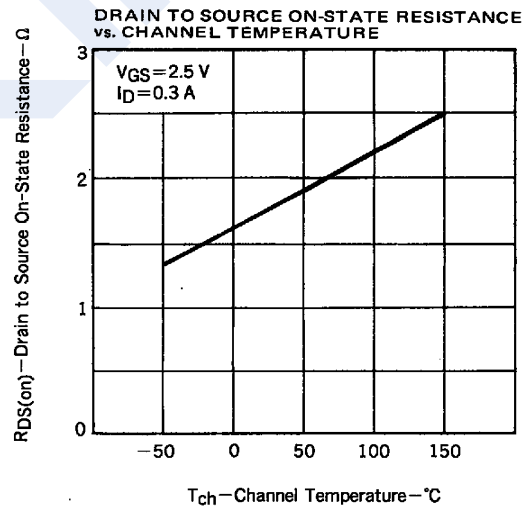
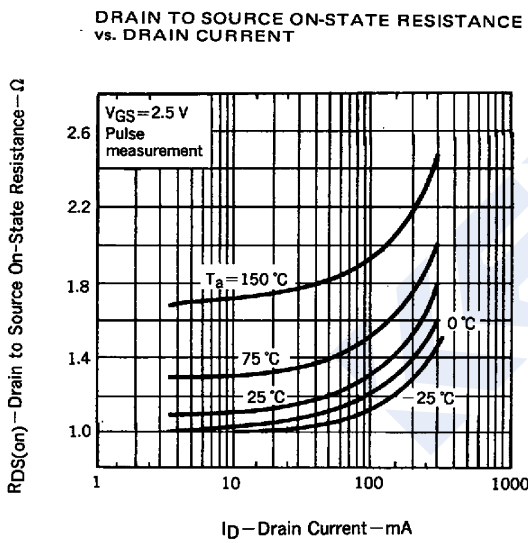
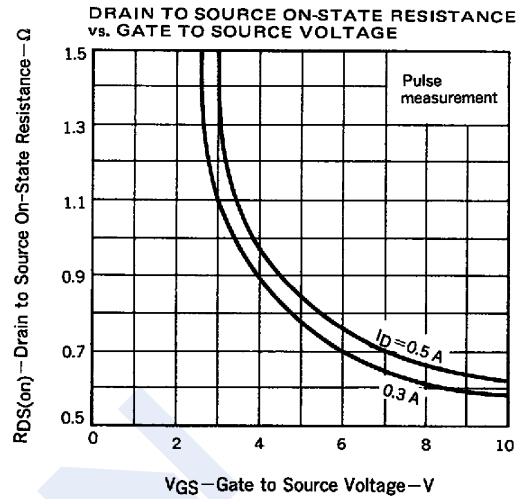
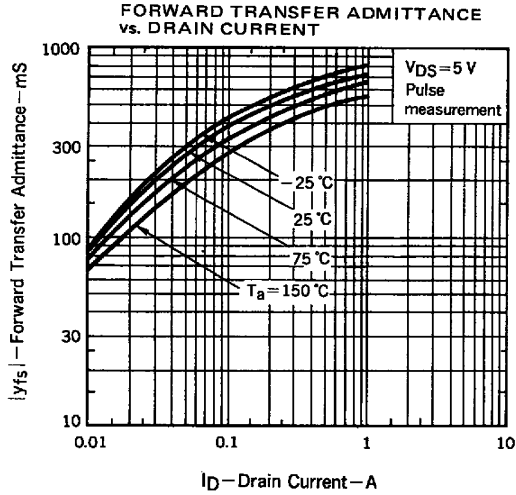
N-Channel MOSFET 2SK1583

■ Typical Characteristics



N-Channel MOSFET 2SK1583

Typical Characteristics



N-Channel MOSFET 2SK1583

■ Typical Characteristics

