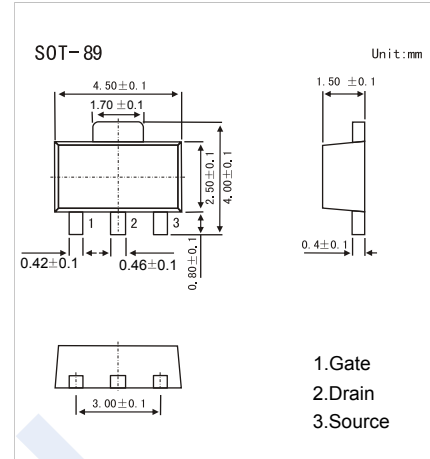
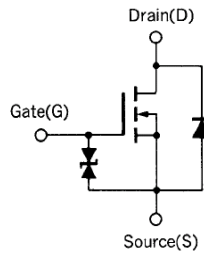


N-Channel MOSFET

2SK1586

■ Features

- $V_{DS} (V) = 30V$
- $I_D = 1 A$
- $R_{DS(ON)} < 0.6 \Omega$ ($V_{GS} = 10V$)
- $R_{DS(ON)} < 1 \Omega$ ($V_{GS} = 4V$)



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	1	A
Pulsed Drain Current (Note.1)	I_{DM}	2	
Power Dissipation	P_D	2	W
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 $T_a = 25^\circ C$

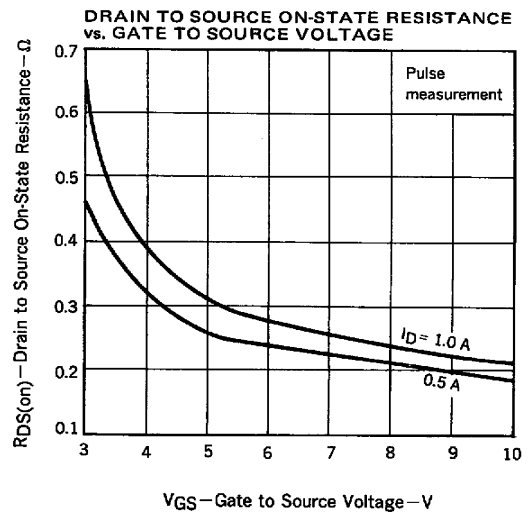
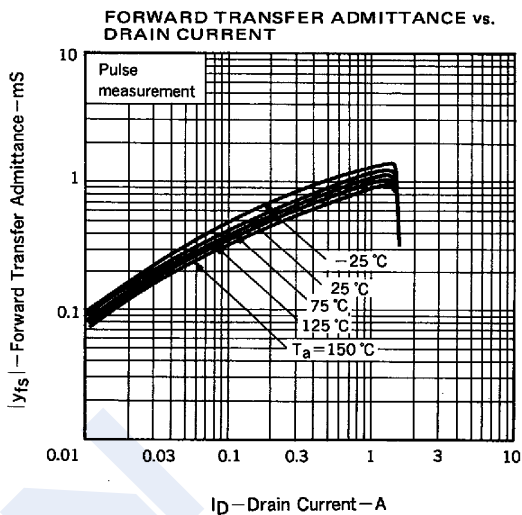
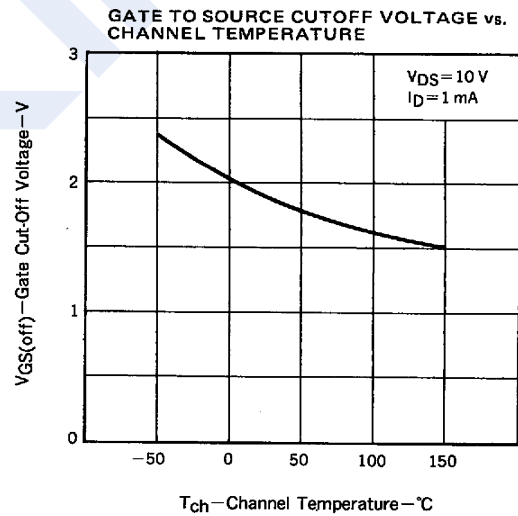
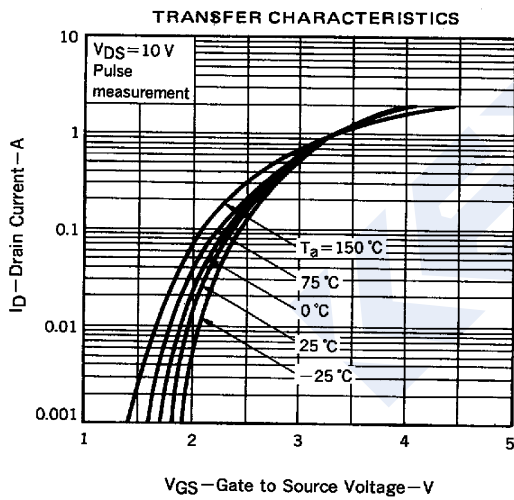
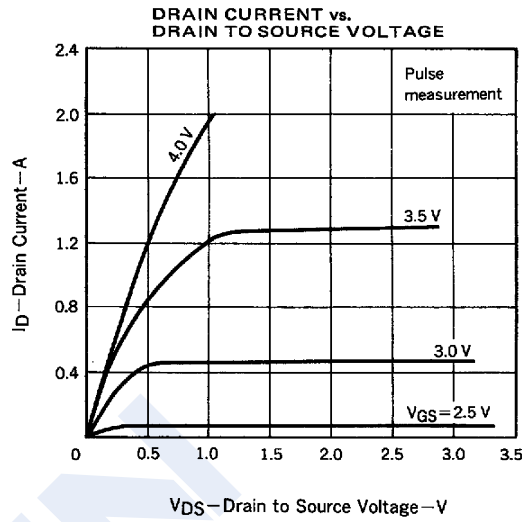
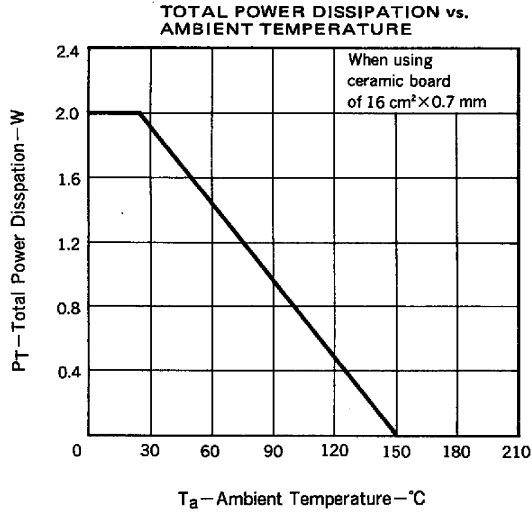
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{BSS}	$I_D = 250 \mu A$, $V_{GS} = 0V$	30			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 30V$, $V_{GS} = 0V$			1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{DS} = 0V$, $V_{GS} = \pm 20V$			± 10	μA
Gate Cut-off Voltage	$V_{GS(off)}$	$V_{DS} = 10V$, $I_D = 1mA$	1.3		2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = 10V$, $I_D = 0.5A$			0.6	Ω
		$V_{GS} = 4V$, $I_D = 0.5A$			1	
Forward Transconductance	g_{FS}	$V_{DS} = 5V$, $I_D = 0.5A$	0.4			S
Input Capacitance	C_{iss}	$V_{GS} = 0V$, $V_{DS} = 5V$, $f = 1MHz$		170		μF
Output Capacitance	C_{oss}			170		
Reverse Transfer Capacitance	C_{rss}			55		
Turn-On Delay Time	$t_{d(on)}$				50	
Turn-On Rise Time	t_r	$V_{GS(on)} = 5V$, $V_{DS} = 20V$, $I_D = 0.5A$, $R_L = 40 \Omega$, $R_G = 10 \Omega$		220		
Turn-Off Delay Time	$t_{d(off)}$			210		
Turn-Off Fall Time	t_f			230		

■ Marking

Marking	NI

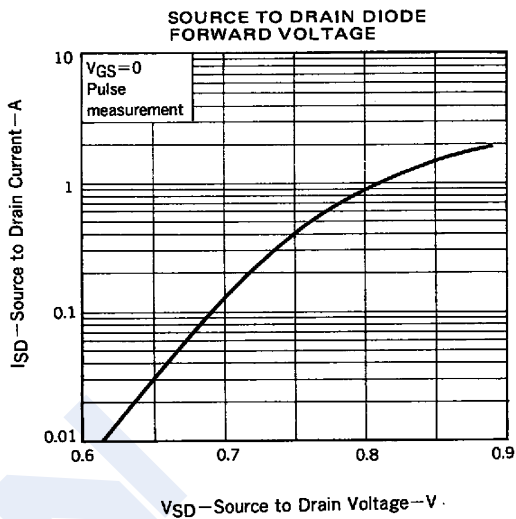
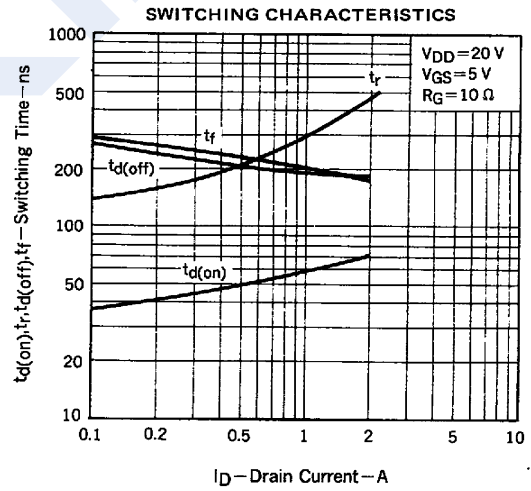
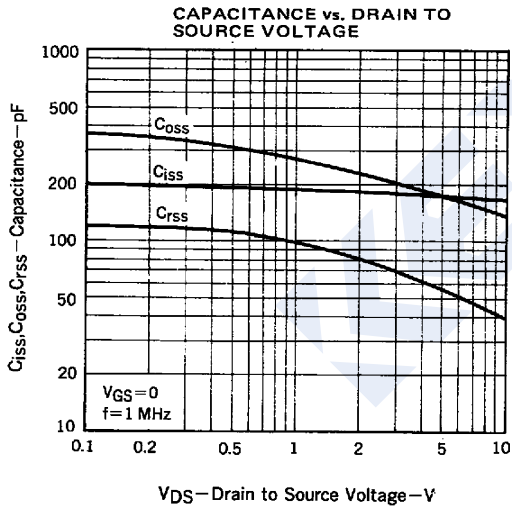
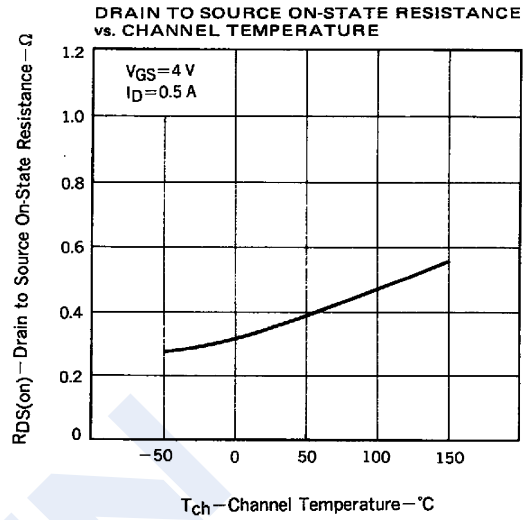
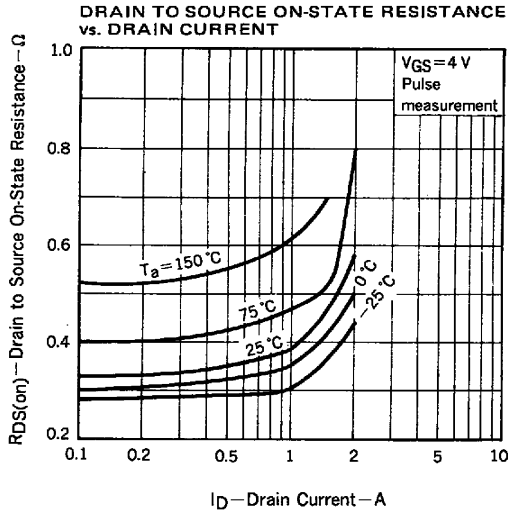
N-Channel MOSFET 2SK1586

■ Typical Characteristics



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■ Typical Characteristics



N-Channel MOSFET 2SK1586

■ Typical Characteristics

