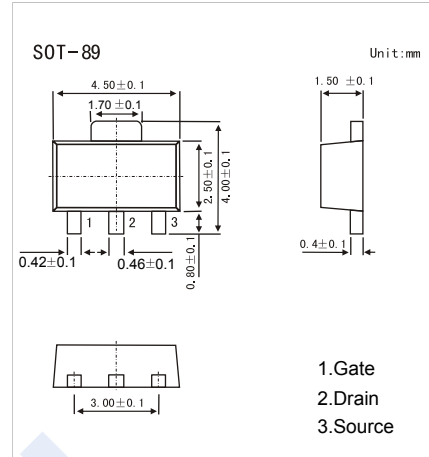
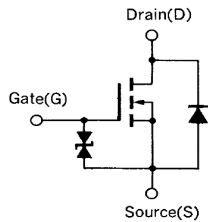


N-Channel MOSFET

2SK1588-HF

Features

- $V_{DS} = 16V$
- $I_D = 3A$
- $R_{DS(ON)} < 0.3\ \Omega$ ($V_{GS} = 4V$)
- $R_{DS(ON)} < 0.5\ \Omega$ ($V_{GS} = 2.5V$)
- Pb-Free Package May be Available.
The G-Suffix Denotes a Pb-Free Lead Finish



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	16	V
Gate-Source Voltage	V_{GS}	± 16	
Continuous Drain Current	I_D	3	A
Pulsed Drain Current (Note.1)	I_{DM}	6	
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 $T_a = 25^\circ C$

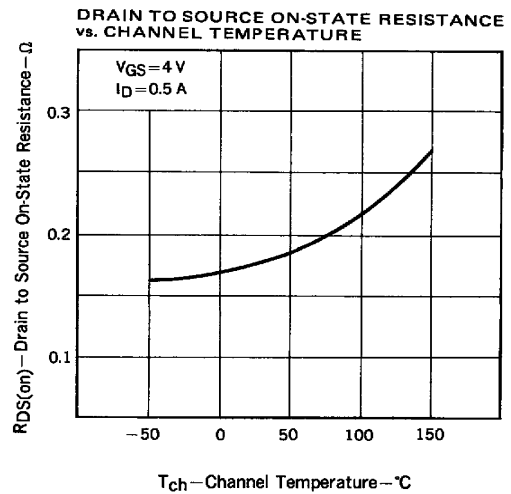
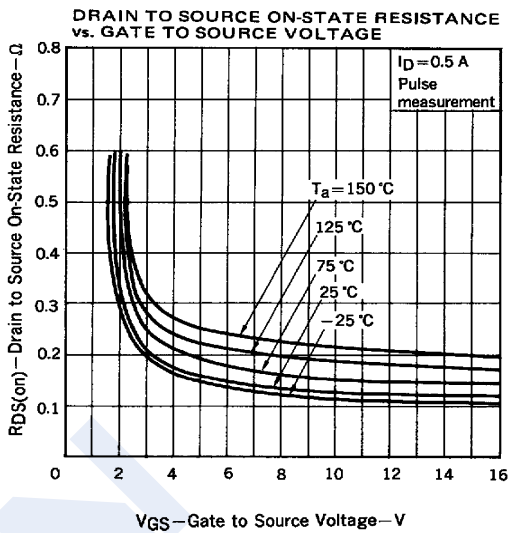
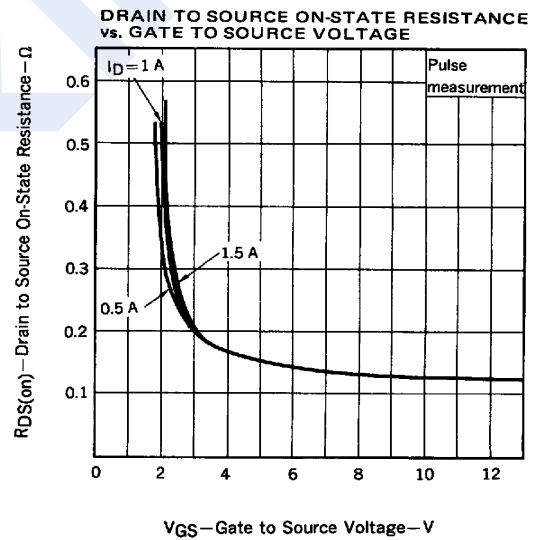
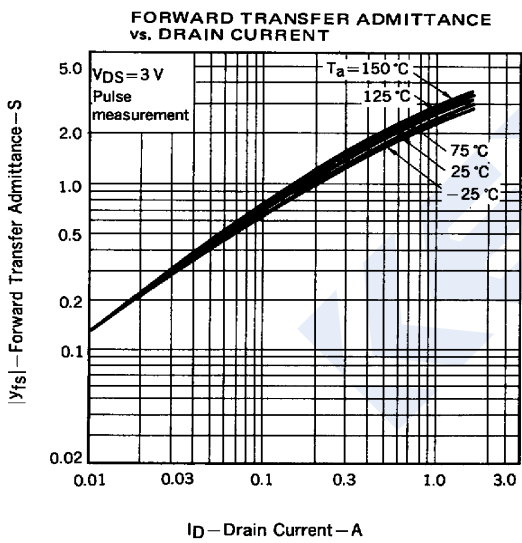
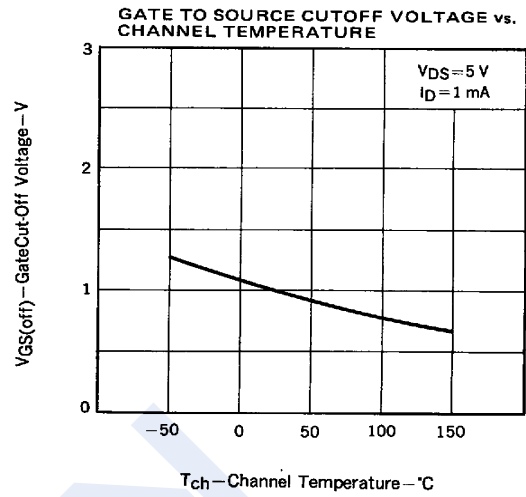
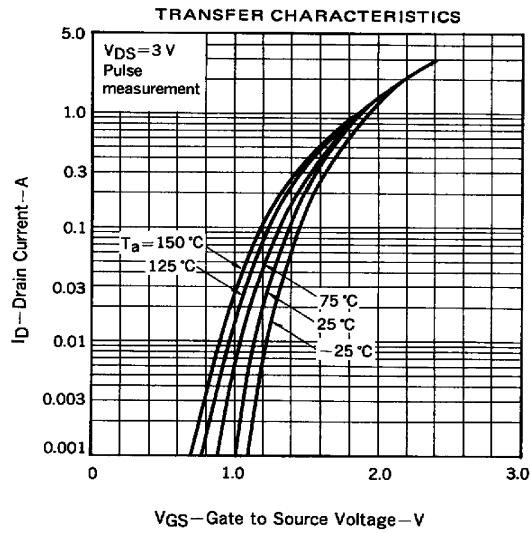
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$I_D = 250\ \mu A$, $V_{GS} = 0V$	16			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 16V$, $V_{GS} = 0V$			1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{DS} = 0V$, $V_{GS} = \pm 16V$			± 5	μA
Gate Cut-off Voltage	$V_{GS(off)}$	$V_{DS} = 5V$, $I_D = 1mA$	0.8		1.6	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = 4V$, $I_D = 1.5A$			0.3	Ω
		$V_{GS} = 2.5V$, $I_D = 1A$			0.5	
Forward Transconductance	g_{FS}	$V_{DS} = 3V$, $I_D = 1A$	0.4	3		S
Input Capacitance	C_{iss}	$V_{GS} = 0V$, $V_{DS} = 3V$, $f = 1MHz$		240		μF
Output Capacitance	C_{oss}			250		
Reverse Transfer Capacitance	C_{rss}			60		
Turn-On Delay Time	$t_{d(on)}$				140	
Turn-On Rise Time	t_r	$V_{GS(on)} = 3V$, $V_{DS} = 3V$, $I_D = 1.5A$, $R_L = 2\ \Omega$, $R_G = 10\ \Omega$		650		
Turn-Off Delay Time	$t_{d(off)}$			120		
Turn-Off Fall Time	t_f			160		

Marking

Marking	NG F
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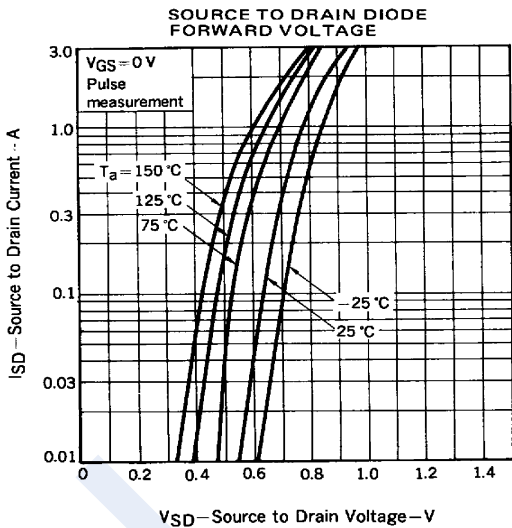
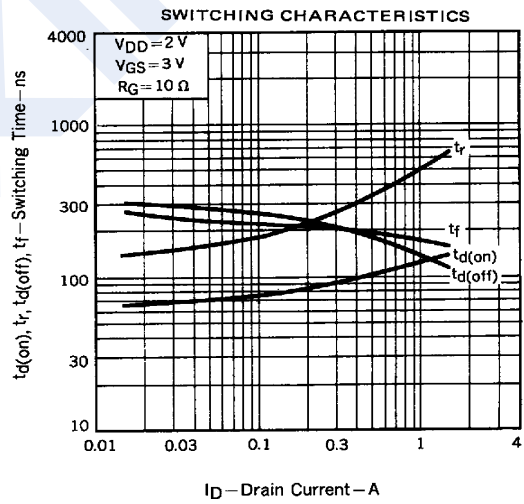
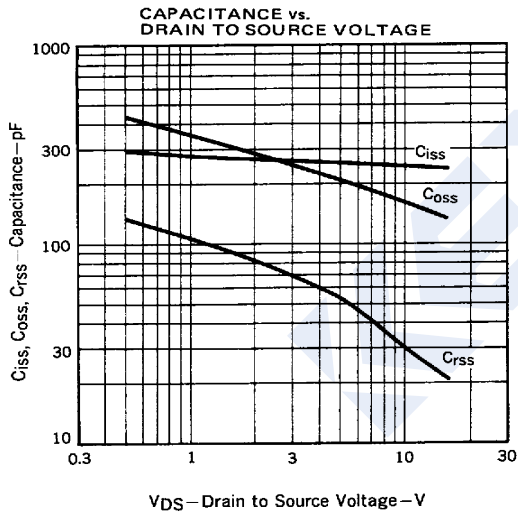
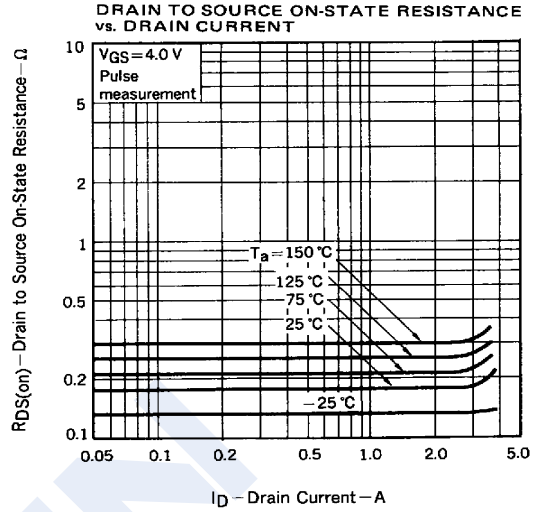
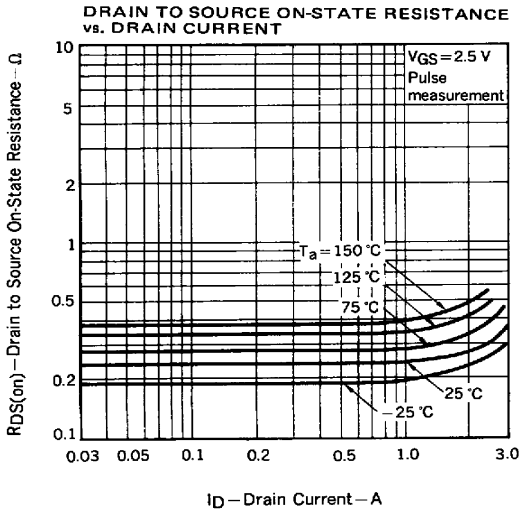
N-Channel MOSFET 2SK1588-HF

■ Typical Characteristics



N-Channel MOSFET 2SK1588-HF

■ Typical Characteristics



N-Channel MOSFET

2SK1588-HF

■ Typical Characteristics

