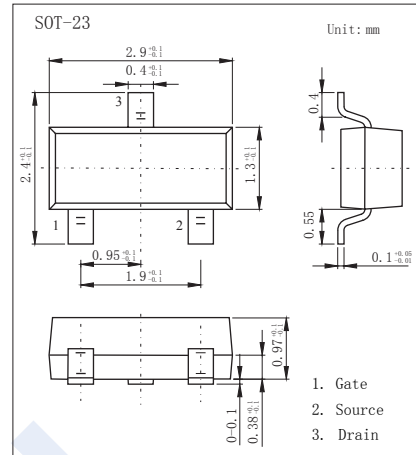
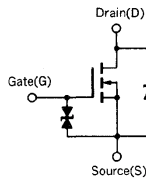


## N-Channel MOSFET

### 2SK1582

#### ■ Features

- $V_{DS} = 30V$
- $I_D = 0.2 A$
- $R_{DS(ON)} < 5 \Omega$  ( $V_{GS} = 4V$ )
- $R_{DS(ON)} < 3 \Omega$  ( $V_{GS} = 10V$ )



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	30	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	
Continuous Drain Current	$I_D$	200	mA
Pulsed Drain Current (Note.1)	$I_{DM}$	400	
Power Dissipation $T_a = 25^\circ C$	$P_D$	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 $T_a = 25^\circ C$

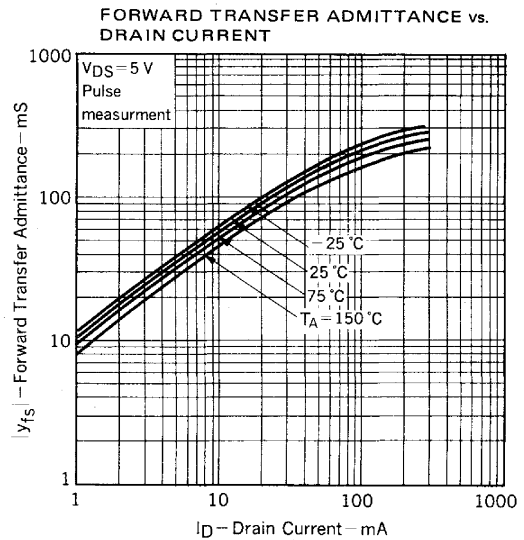
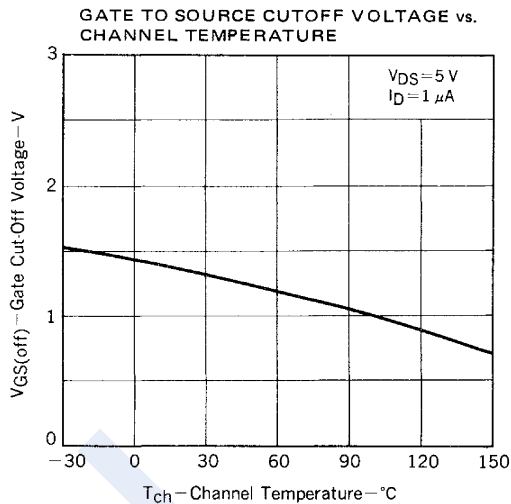
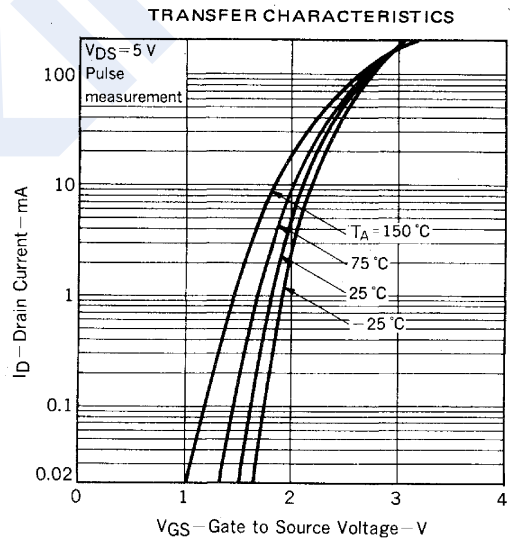
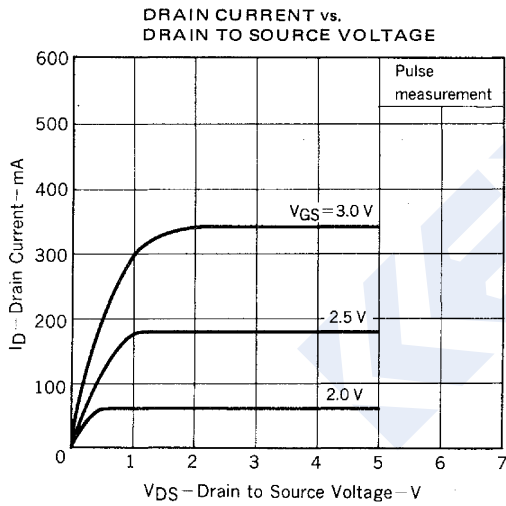
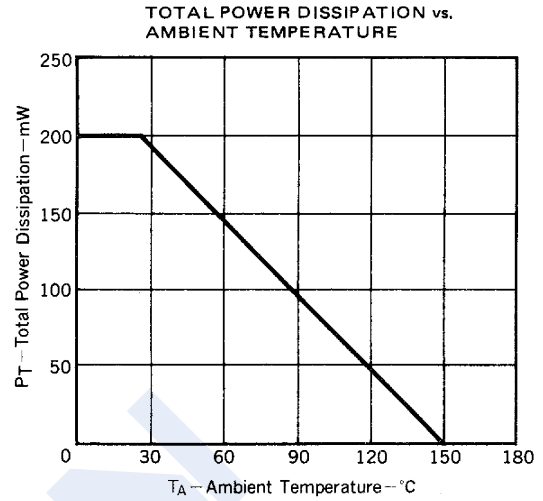
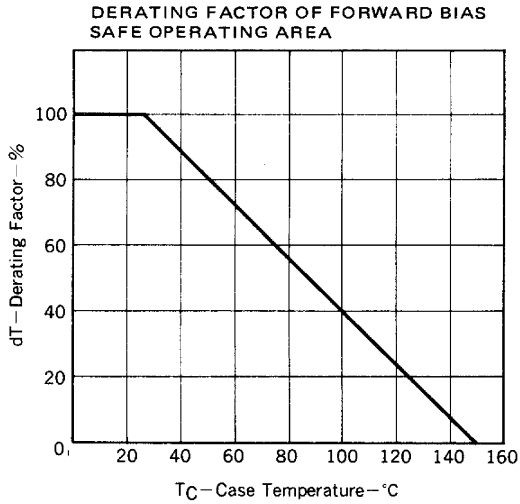
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$V_{DSS}$	$I_D = 250 \mu A$ , $V_{GS} = 0V$	30			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = 30V$ , $V_{GS} = 0V$			1	$\mu A$
Gate-Body Leakage Current	$I_{GSS}$	$V_{DS} = 0V$ , $V_{GS} = \pm 20V$			$\pm 1$	$\mu A$
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	$R_{DS(on)}$	$V_{GS} = 4V$ , $I_D = 10m A$			5	$\Omega$
		$V_{GS} = 10V$ , $I_D = 10m A$			3	
Forward Transconductance	$g_{FS}$	$V_{DS} = 5V$ , $I_D = 10m A$	20	60		mS
Input Capacitance	$C_{iss}$	$V_{GS} = 0V$ , $V_{DS} = 5V$ , $f = 1MHz$		28		pF
Output Capacitance	$C_{oss}$			30		
Reverse Transfer Capacitance	$C_{rss}$			7		
Turn-On Delay Time	$t_{d(on)}$				55	
Turn-On Rise Time	$t_r$	$V_{GS(on)} = 5V$ , $V_{DS} = 5V$ , $I_D = 10mA$ , $R_L = 500 \Omega$ , $R_G = 10 \Omega$		200		
Turn-Off Delay Time	$t_{d(off)}$			180		
Turn-Off Fall Time	$t_f$			250		

#### ■ Marking

Marking	G15
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## N-Channel MOSFET 2SK1582

■ Typical Characteristics



## N-Channel MOSFET 2SK1582

■ Typical Characteristics

