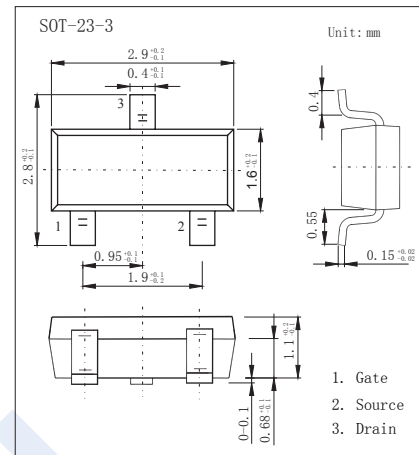
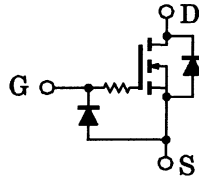


## N-Channel MOSFET

### 2SK2033

#### ■ Features

- $V_{DS} (V) = 20V$
- $I_D = 100mA$
- $R_{DS(ON)} < 12 \Omega$  ( $V_{GS} = 2.5V$ )
- Low threshold voltage:  $V_{th} = 0.5 \sim 1.5 V$



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	20	V
Gate-Source Voltage	$V_{GS}$	$\pm 10$	
Continuous Drain Current	$I_D$	100	mA
Power Dissipation	$P_D$	200	mW
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 to 150	

#### ■ Electrical Characteristics $T_a = 25^\circ C$

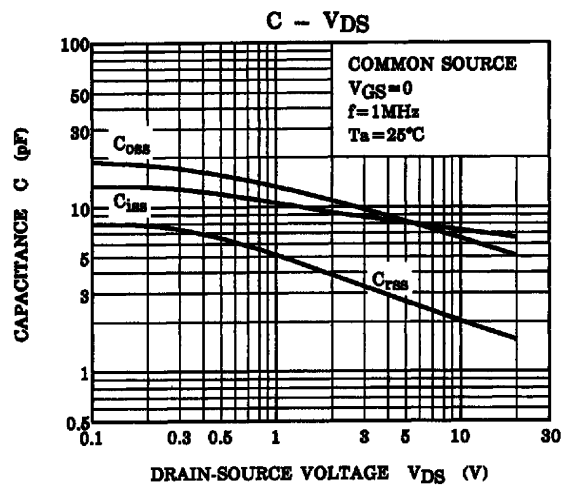
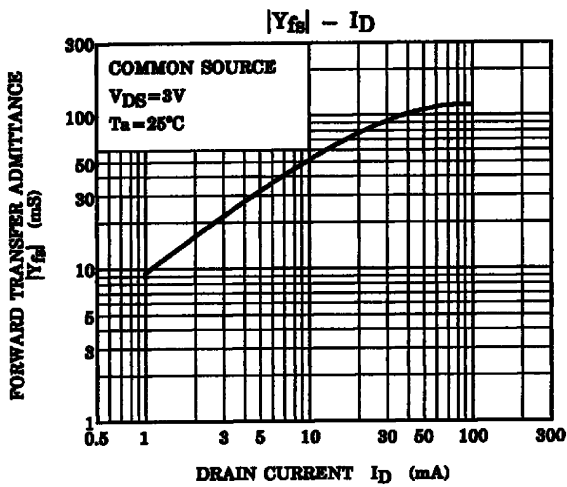
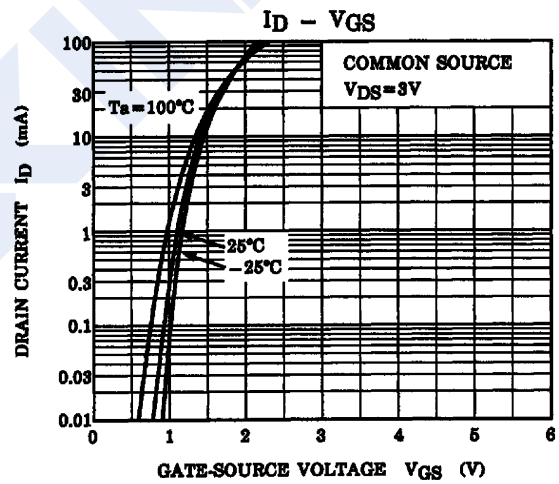
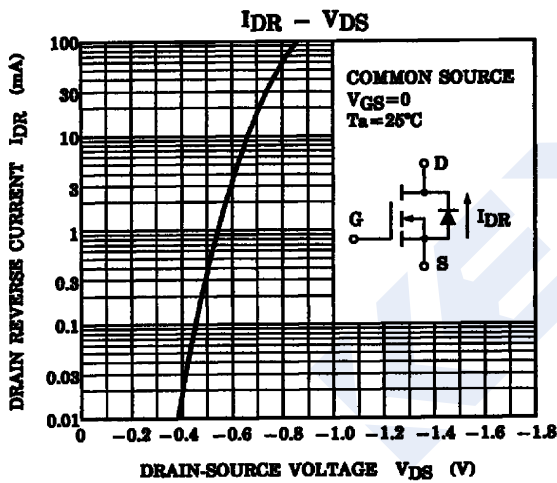
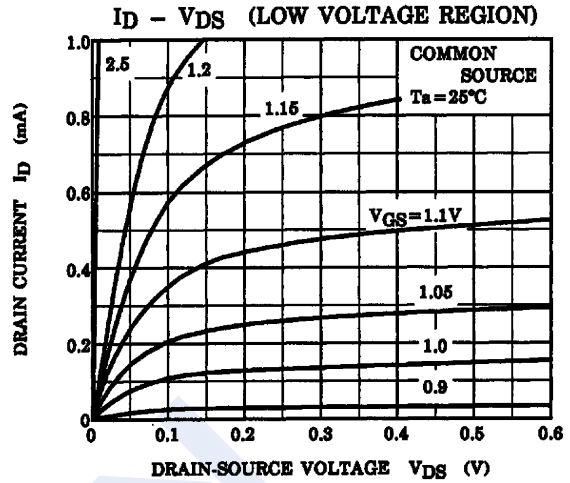
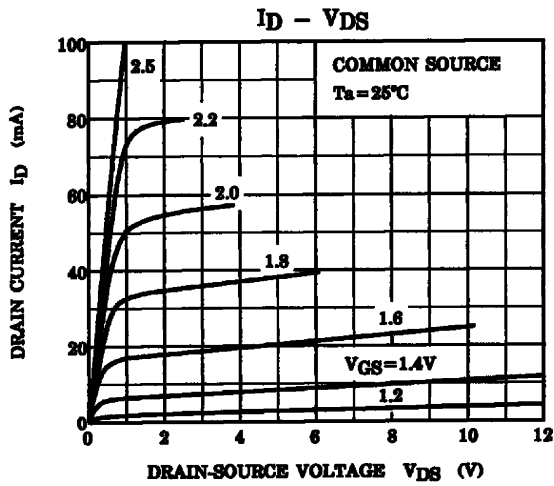
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$V_{DS}$	$I_D = 250 \mu A, V_{GS} = 0V$	20			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = 20V, V_{GS} = 0V$			1	$\mu A$
Gate-Body Leakage Current	$I_{GSS}$	$V_{DS} = 0V, V_{GS} = \pm 10V$			$\pm 1$	$\mu A$
Gate threshold voltage	$V_{GS(th)}$	$V_{DS} = 3V, I_D = 100 \mu A$	0.5		1.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = 2.5V, I_D = 10mA$			12	$\Omega$
Forward Transconductance	$g_{FS}$	$V_{DS} = 3V, I_D = 10mA$	25	50		ms
Input Capacitance	$C_{iss}$	$V_{GS} = 0V, V_{DS} = 3V, f = 1MHz$		8.5		$\mu F$
Output Capacitance	$C_{oss}$			3.3		
Reverse Transfer Capacitance	$C_{rss}$			9.3		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS} = 0 \sim 2.5V, V_{DS} = 3V, I_D = 10mA$		160		ns
Turn-Off DelayTime	$t_{d(off)}$			150		

#### ■ Marking

Marking	KP
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## N-Channel MOSFET 2SK2033

■ Typical Characteristics



## N-Channel MOSFET 2SK2033

■ Typical Characteristics

