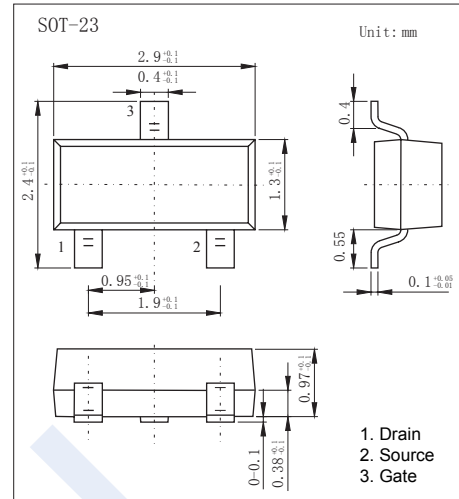
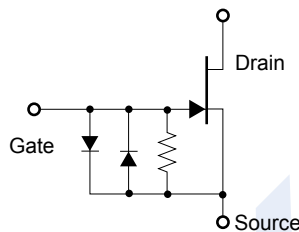


## N-Channel Junction Field Effect Transistors

### 2SK1109

#### ■ Features

- $V_{DS} (V) = 20V$
- $I_D = 10m A$
- High forward transfer admittance  
1000  $\mu s$  TYP. ( $I_{DSS} = 100 \mu A$ )  
1600  $\mu s$  TYP. ( $I_{DSS} = 200 \mu A$ )
- Includes diode and high resistance at G - S



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage @ $V_{GS} = -1 V$	$V_{DS}$	20	V
Gate to Drain Voltage	$V_{DG}$	$\pm 20$	
Continuous Drain Current	$I_D$	10	mA
Gate Current	$I_G$	10	
Power Dissipation	$P_D$	80	mW
Junction Temperature	$T_J$	125	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 to 125	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$V_{DSS}$	$I_D = 250 \mu A, V_{GS} = 0V$	20			V
Zero Gate Voltage Drain Cut-off Current	$I_{DSS}$	$V_{DS} = 5V, V_{GS} = 0V$	40		600	$\mu A$
Gate Cut-off Voltage	$V_{GS(off)}$	$V_{DS} = 5V, I_D = 1 \mu A$	-0.1		-1	V
Forward Transfer Admittance	$g_{FS}$	$V_{DS} = 5V, I_D = 30 \mu A, f = 1KHz$	350			$\mu s$
		$V_{DS} = 5V, I_D = 0A, f = 1KHz$	350			
Input Capacitance	$C_{iss}$	$V_{GS} = 0V, V_{DS} = 5V, f = 1MHz$		7	8	pF
Noise Voltage	NV	See Test Circuit		1.8	3	$\mu V$

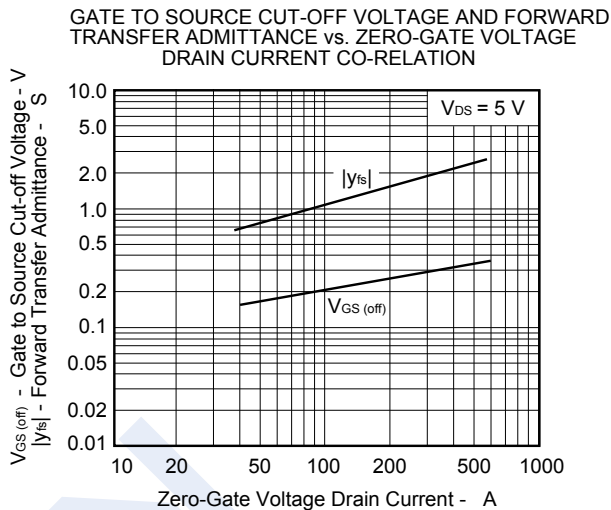
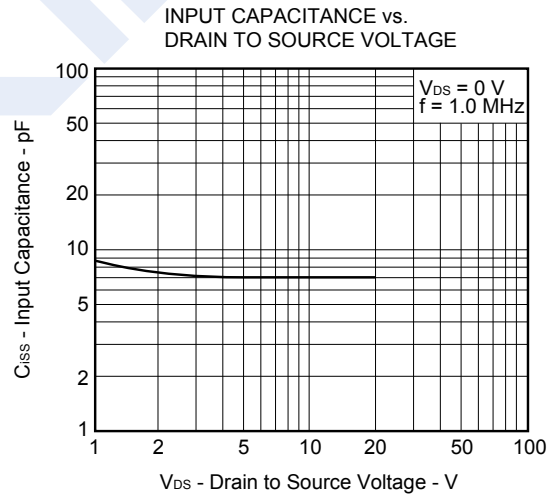
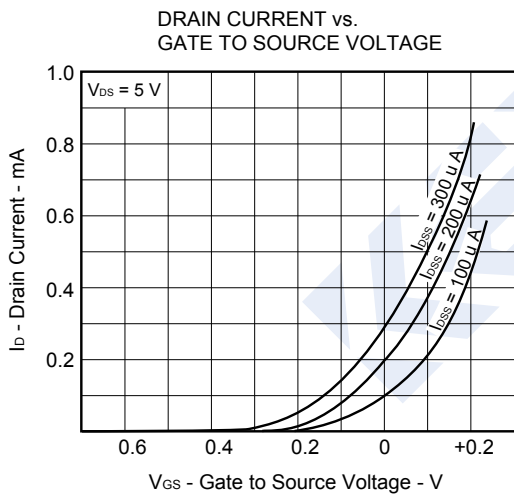
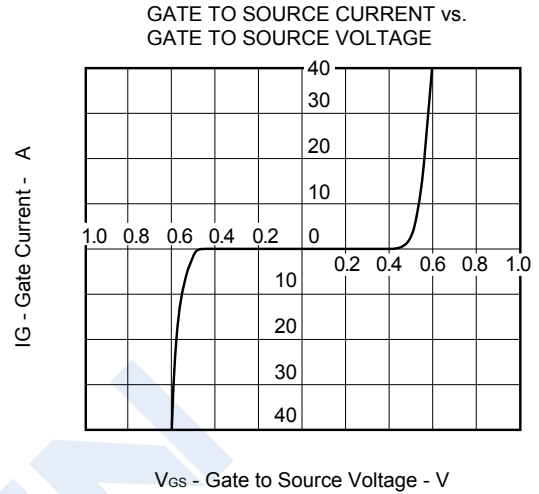
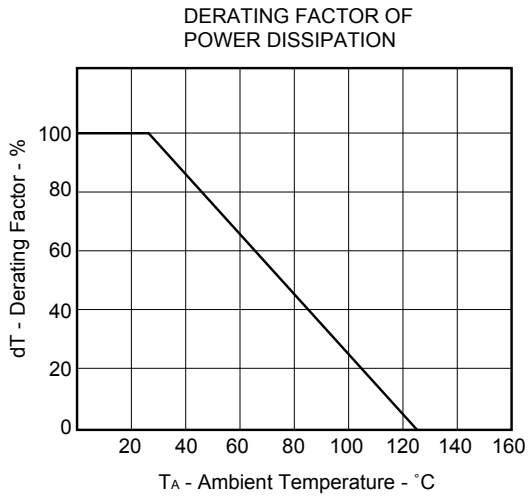
#### ■ $I_{DSS}$ Rank

$I_{DSS} (\mu A)$	40-70	60-110	90-180	150-300	200-450	300-600
Marking	J32	J33	J34	J35	J36	J37

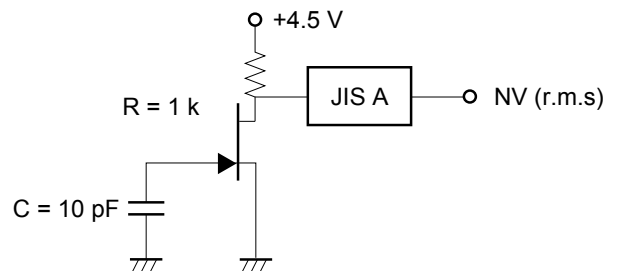
# N-Channel Junction Field Effect Transistors

## 2SK1109

■ Typical Characteristics



Noise Voltage Test Circuit



## N-Channel Junction Field Effect Transistors

### 2SK1109

#### Typical Characteristics

