





## 2N7002KDHQ

### Electrical Characteristics ( $T_J=25$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
<b>Static Parameter</b>						
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS}=0V, I_D=250\mu A$	60			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=60V, V_{GS}=0V$			1	$\mu A$
Gate-Body Leakage Current	$I_{GSS}$	$V_{GS}=20V, V_{DS}=0V$			10	$\mu A$
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu A$	1.1	1.5	2.4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V, I_D=300mA$		1.1	2.0	
		$V_{GS}=4.5V, I_D=200mA$		1.3	2.5	
Diode Forward Voltage	$V_{SD}$	$I_S=115mA, V_{GS}$				



Typical Performance Characteristics

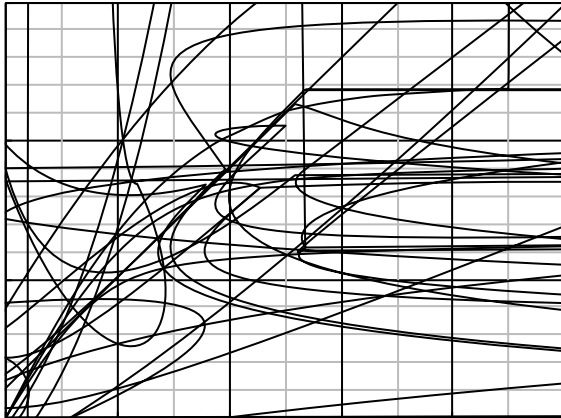


Figure1. Output Characteristics

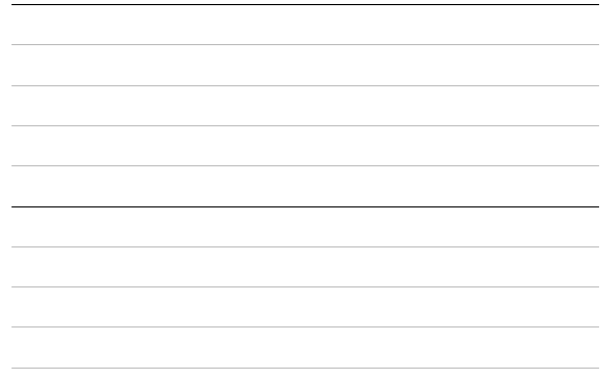


Figure2. Transfer Characteristics

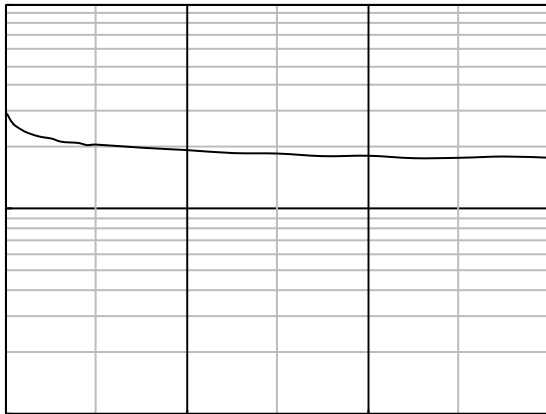


Figure3. Capacitance Characteristics

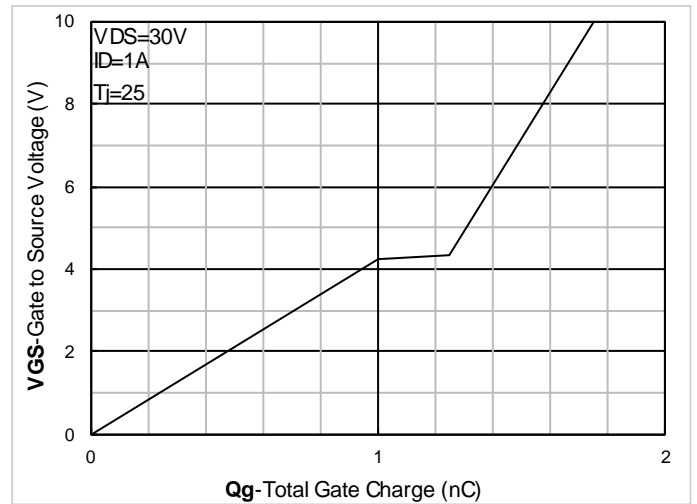


Figure4. Gate Charge

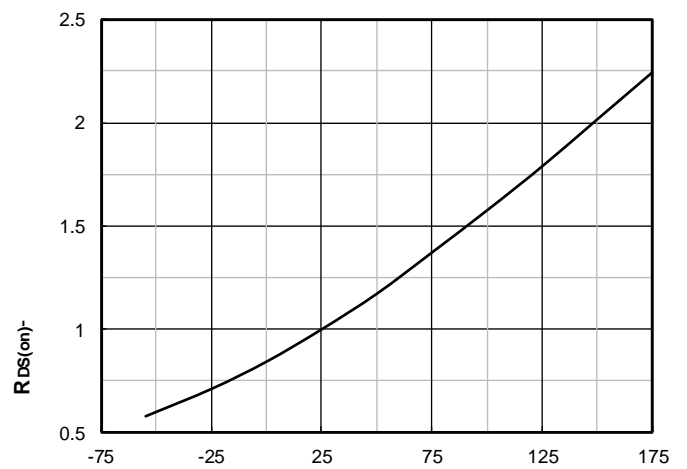


Figure5. On-Resistance vs Gate to Source Voltage

Figure6. Normalized On-Resistance



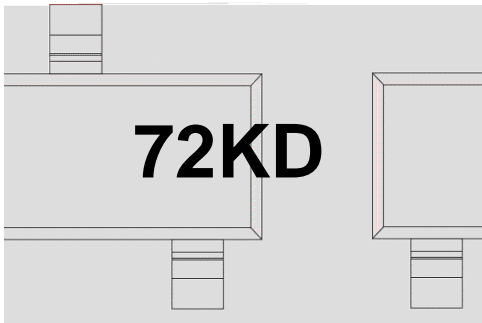




## SOT-23 Package Outline Dimensions

UNIT mm

### Marking Information



**Note:**

1. All marking is at middle of the product body
2. All marking is in laser marking
3. 72KD is Marking Code
4. Body color: Black

