



## 2N7002KDWHQ

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### N-Channel Enhancement Mode Field Effect Transistor

#### Product Summary

- $V_{DS}$  60V
- $I_D$  300mA
- $R_{DS(ON)}$ ( at  $V_{GS}=10V$ ) 2.0ohm
- $R_{DS(ON)}$ ( at  $V_{GS}=4.5V$ ) 2.5ohm
- ESD protected up to 2.0KV (HBM)

#### General Description

- Trench Power MV MOSFET technology





## ■ Typical Performance Characteristics

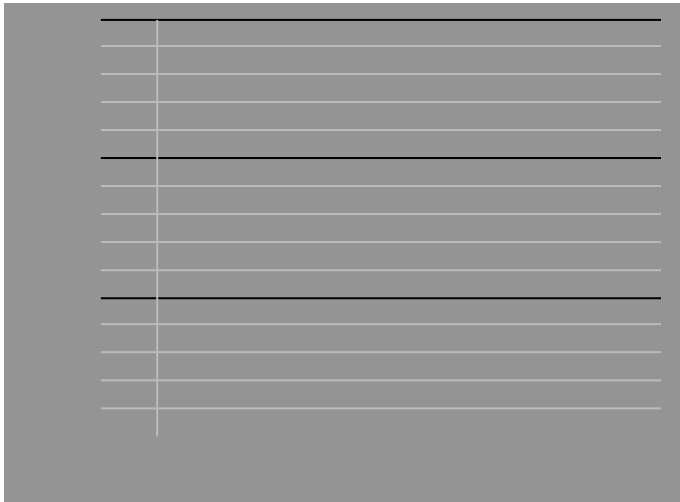


Figure1. Output Characteristics

Figure2. Transfer Characteristics

Figure3. Capacitance Characteristics

Figure4. Gate Charge

Figure5. On-Resistance vs Gate to Source Voltage

Figure6. Normalized On-Resistance



Figure 7.  $R_{DS(on)}$  VS Drain Current

Figure 8. Forward characteristics of reverse diode

Figure 9. Normalized breakdown voltage

Figure 10. Normalized Threshold voltage

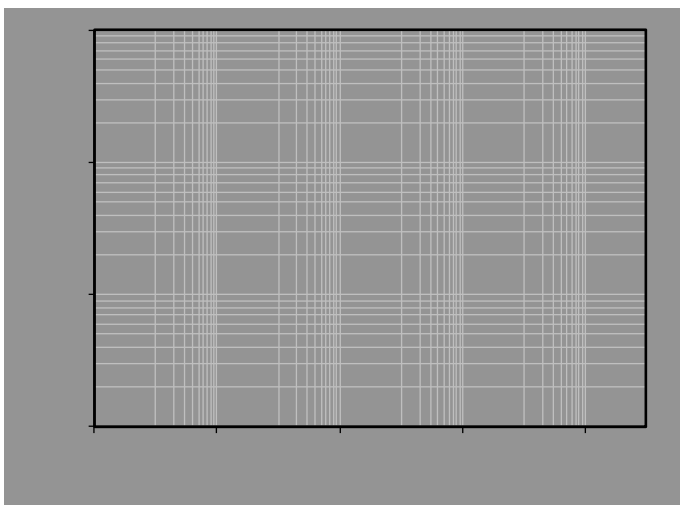


Figure 11. Maximum Transient Thermal Impedance

Figure 12. Safe Operation Area



## ■ Test Circuits & Waveforms

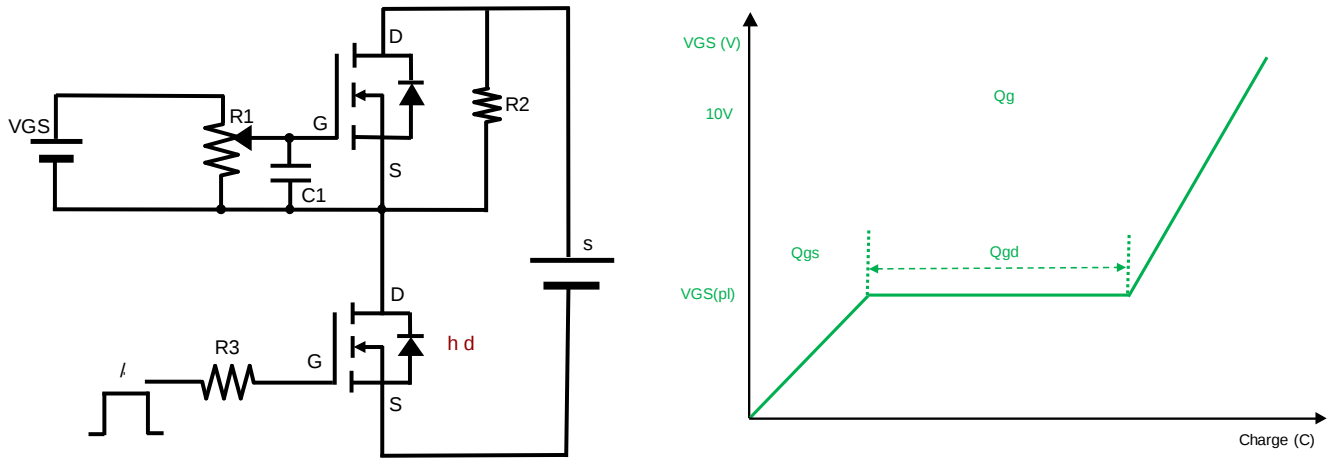


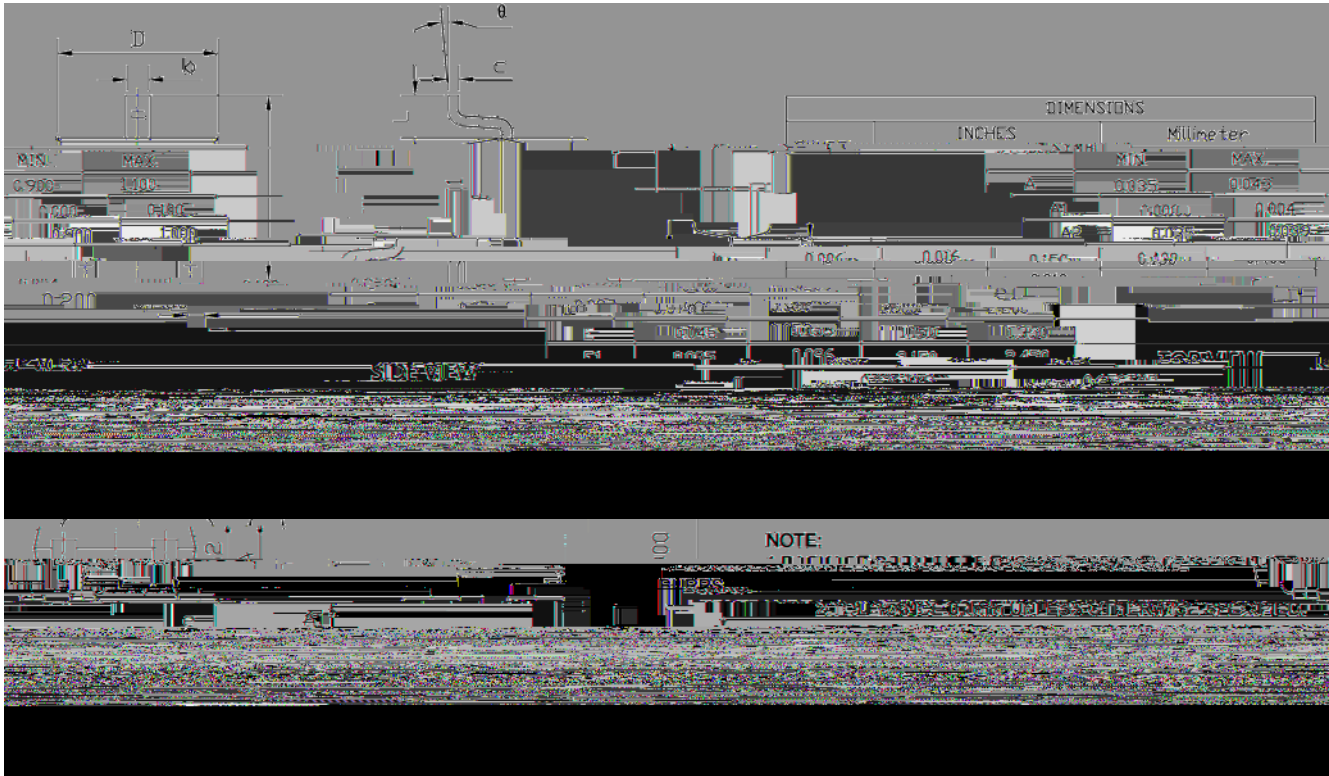
Figure B. Resistive Switching Test Circuit & Waveform

Figure C. Diode Recovery Test Circuit & Waveform



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### ■ SOT-323 Package Outline Dimensions



### ■ Marking Information

72KD<sub>p</sub>

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



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### Disclaimer

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