



N-Channel Enhancement Mode Field Effect Transistor

Product Summary

χ V_{DS}	60V
χ I_D	350mA
χ $R_{DS(ON)}$ (at $V_{GS}=10V$)	1.0 Ω
χ $R_{DS(ON)}$ (at $V_{GS}=4.5V$)	1.4 Ω

General Description

- χ Trench Power MV MOSFET technology
- χ Voltage controlled small signal switch
- χ Low input Capacitance
- χ Fast Switching Speed
- χ Low Input / Output Leakage
- χ Moisture Sensitivity Level 1
- χ Epoxy Meets UL 94 V-0 Flammability Rating
- χ Halogen Free

Applications

- χ Battery operated systems
- χ Solid-state relays
- χ Direct logic-level interface TTL/CMOS

Ω Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Limit	Unit
-----------	--------	-------	------

Drain-



2N7002C

Electrical Characteristics (T_J=25 unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} = 0V, I _D =250μA	60	-	-	V

Zero Gate Voltage





Figure 13. Maximum Transient Thermal Impedance

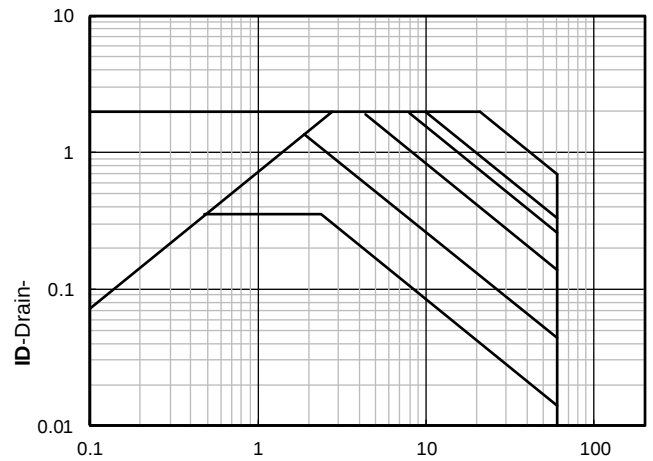


Figure 14. Safe Operation Area

Ω Test Circuits & Waveforms

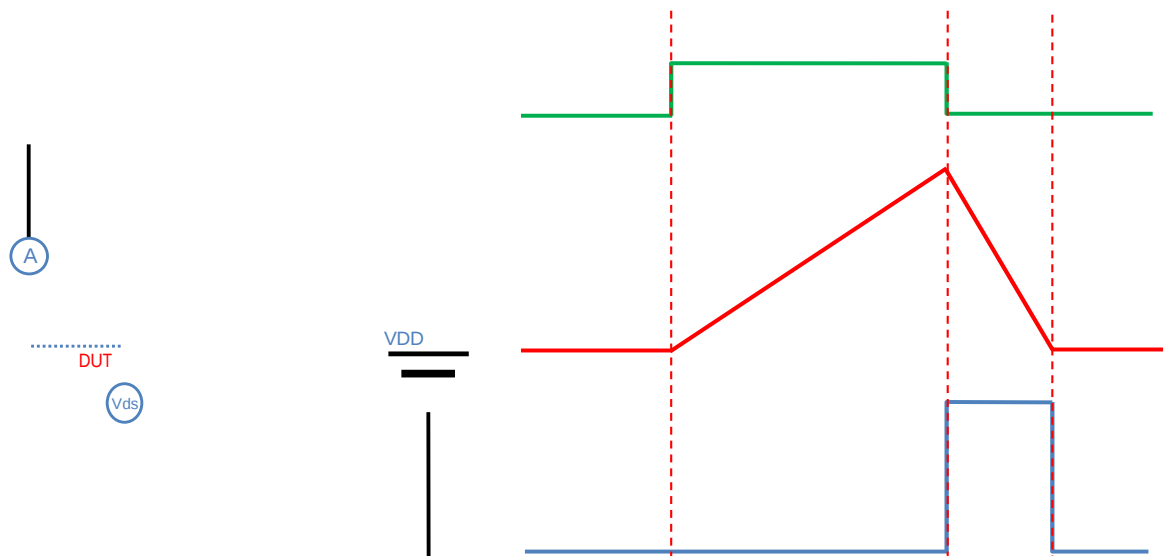
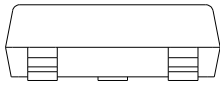
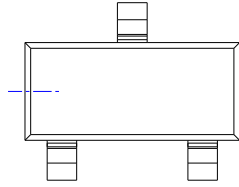


Figure A. Unclamped Inductive Switching (UIS) Test Circuit & Waveform

2N7002C



Ω SOT-23 Package information



UNITÖ mm

