



N-Channel Enhancement Mode Field Effect Transistor

Product Summary

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

General Description

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

Applications

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

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

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

Drain-source Voltage T_m / T^* 500.74 455.59 0.48001 2Q EG51 450 G[Dir]



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



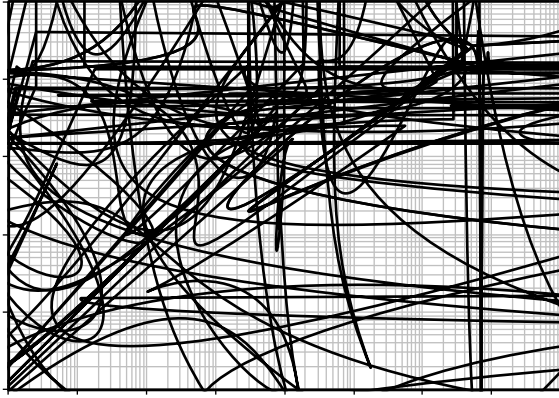


Figure 13. Maximum Transient Thermal Impedance

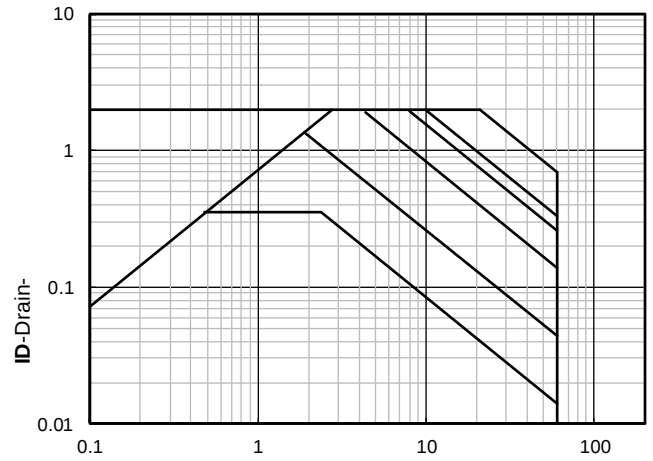


Figure 14. Safe Operation Area

Ω Test Circuits & Waveforms

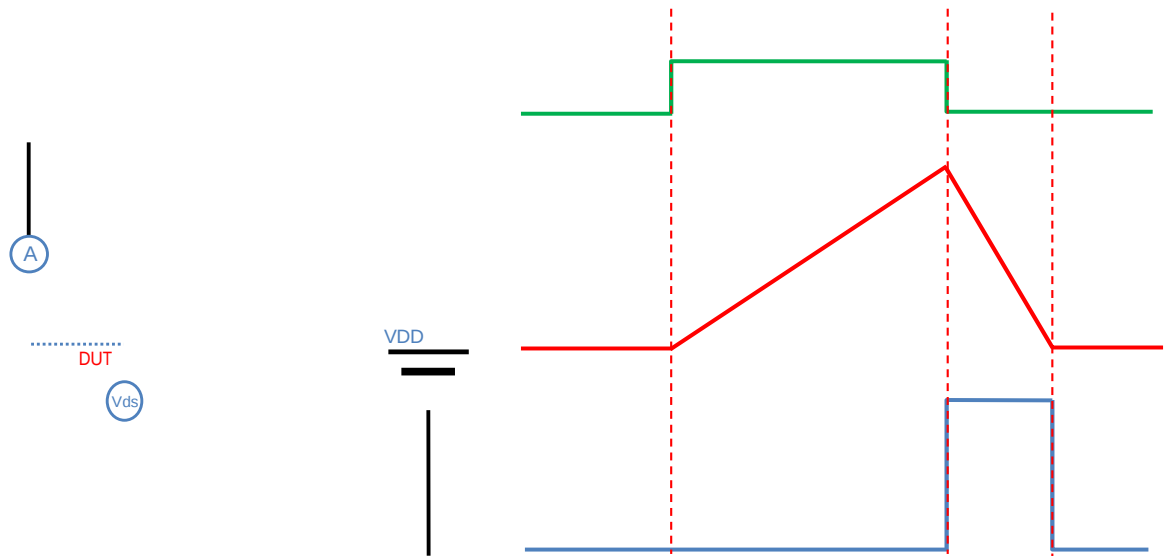
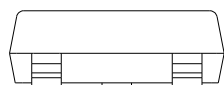
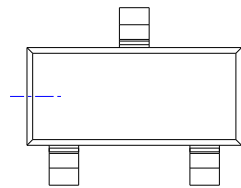


Figure A. Unclamped Inductive Switching (UIS) Test Circuit & Waveform

2N7002C



Ω SOT-23 Package information



UNIT: mm

