N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	30V
I_D	10A
$R_{DS(ON)}$(at V_{GS}=4.5V)	28m
$R_{DS(ON)}$(at V_{GS}=2.5V)	35m
$R_{DS(ON)}$(at V_{GS}=1.8V)	45m

General Description

Split gate trench MOSFET technology
Excellent package for heat dissipation
High density cell design for low $R_{DS(ON)}$

UL 94 V-0 Flammability Rating

supply

Applications

Power switching application
Uninterruptible power supplyswitching

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	30	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=30V, V_{GS}				

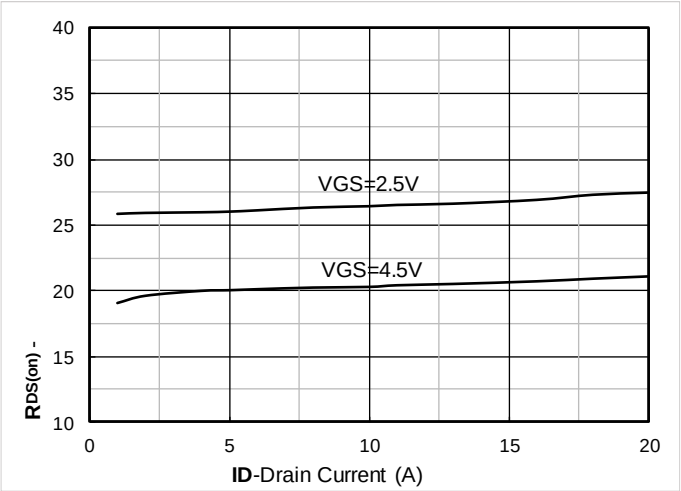

Figure 7. $R_{DS(on)}$ VS Drain Current

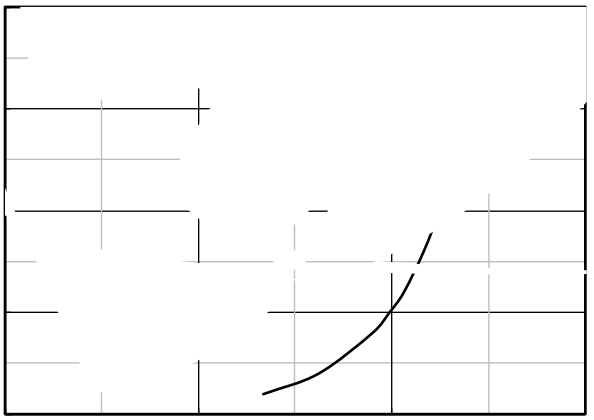

Figure 8. Forward characteristics of reverse diode

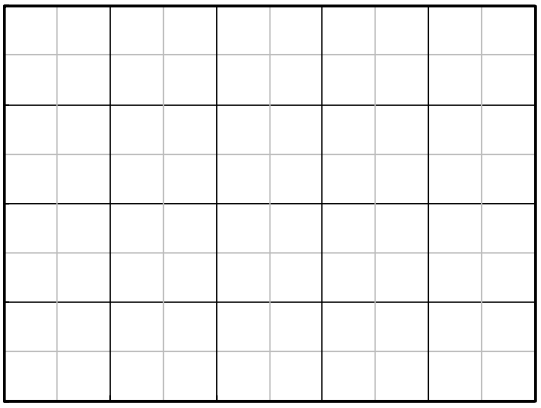

Figure 9. Normalized breakdown voltage

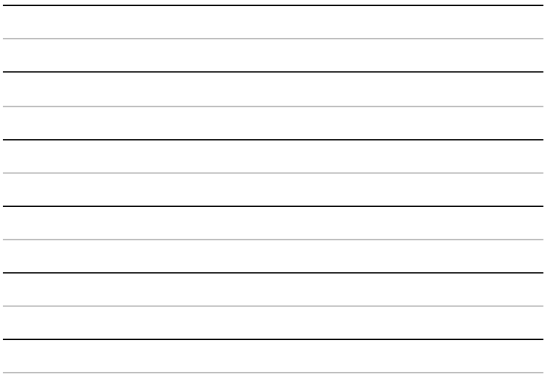

Figure 10. Normalized Threshold voltage

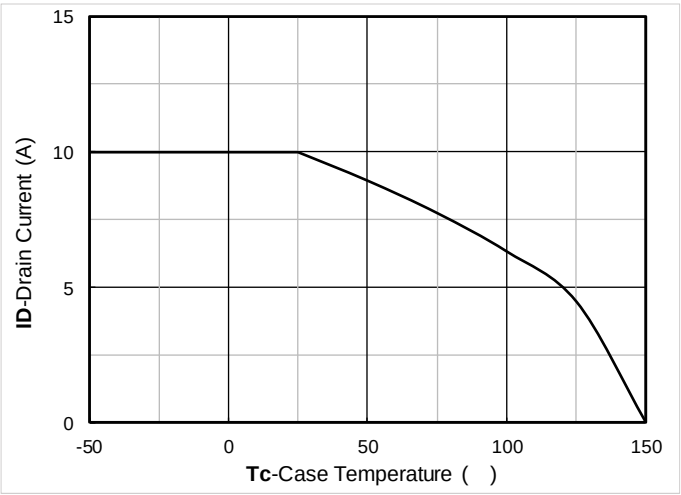

Figure 11. Current dissipation

Figure 12. Power dissipation

Figure 13. Maximum Transient Thermal Impedance

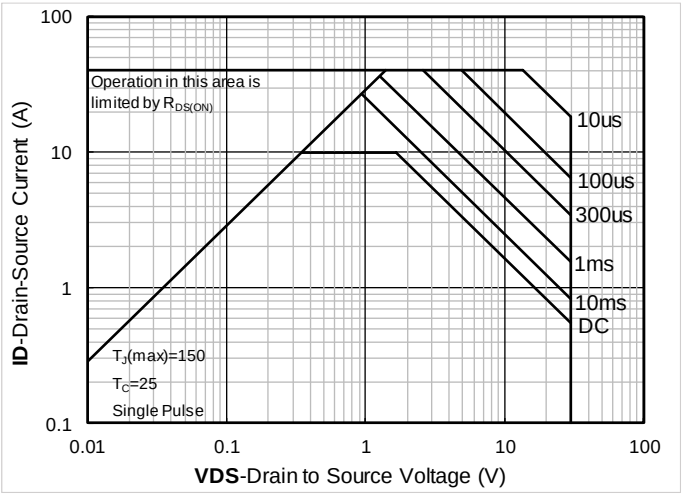

Figure 14. Safe Operation Area

Test Circuits & Waveforms

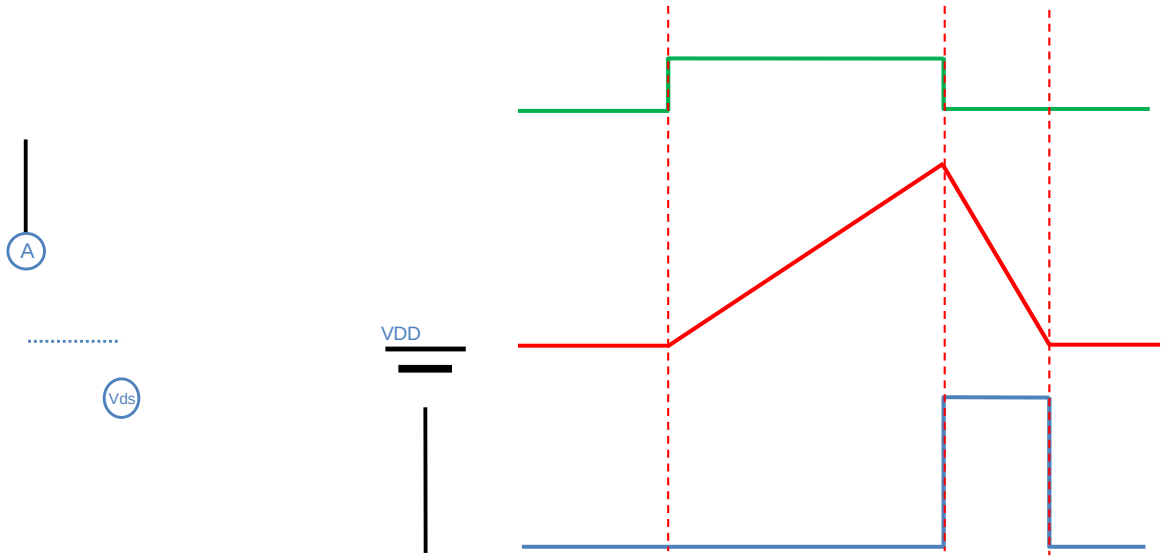

Figure A. Unclamped Inductive Switching (UIS) Test Circuit & Waveform

YJQ10N03A

DFN2020-6L-E-0.8mm Package information