

Feature

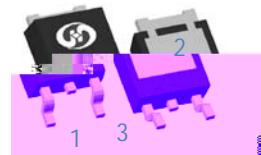
High Speed Power Switching, Logic Level
 Enhanced Body diode dv/dt capability
 Enhanced Avalanche Ruggedness
 100% UIS Tested, 100% Rg Tested
 Lead Free, Halogen Free

DS(on),typ		Ω
DS(on),typ		Ω

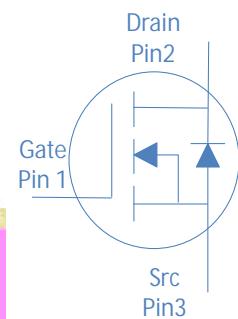
Application

Synchronous Rectification in SMPS
 Hard Switching and High Speed Circuit
 DC/DC in Telecoms and Industrial

TO-252



TO-251



	TO-251	
	TO-252	

=25 (unless otherwise specified)

		=25		
		=100		
Avalanche Energy, Single Pulse	E	=25		
Power Dissipation		=25		W
Operating and Storage Temperature				

Thermal Resistance Junction-Ambient		θ	W
Thermal Resistance Junction-Case		θ	W





Fig 1. Typical Output Characteristics

Figure 2. On-Resistance vs. Gate-Source Voltage

Figure 3. On-Resistance vs. Drain Current and Gate Voltage

Figure 4. Normalized On-Resistance vs. Junction Temperature

Figure 5. Typical Transfer Characteristics

Figure 6. Typical Source-Drain Diode Forward Voltage

Figure 7. Typical Gate-Charge vs. Gate-to-Source Voltage

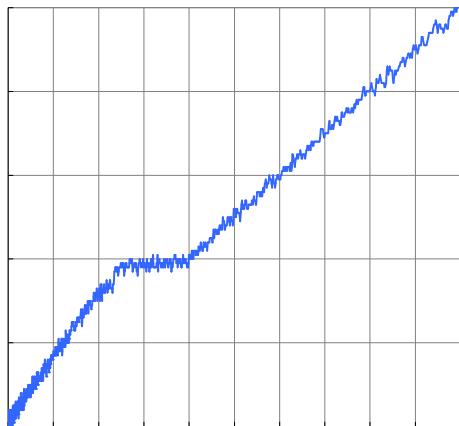


Figure 8. Typical Capacitance vs. Drain-to-Source Voltage

Figure 9. Maximum Safe Operating Area

 I_D (A)

DC

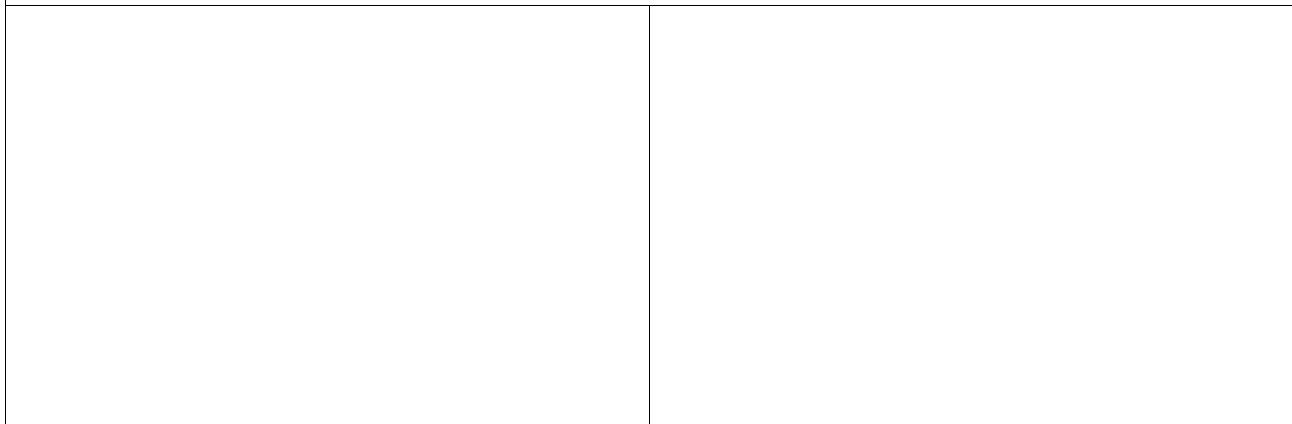
 $=25^\circ C$

V

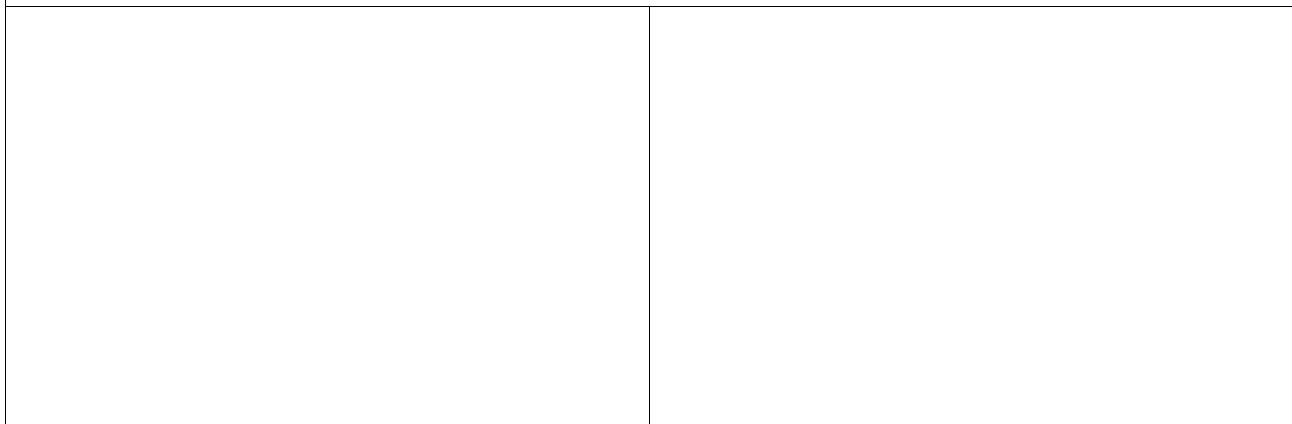
Figure 10. Maximum Drain Current vs. Case Temperature

Figure 11. Normalized Maximum Transient Thermal Impedance, Junction-to-Case

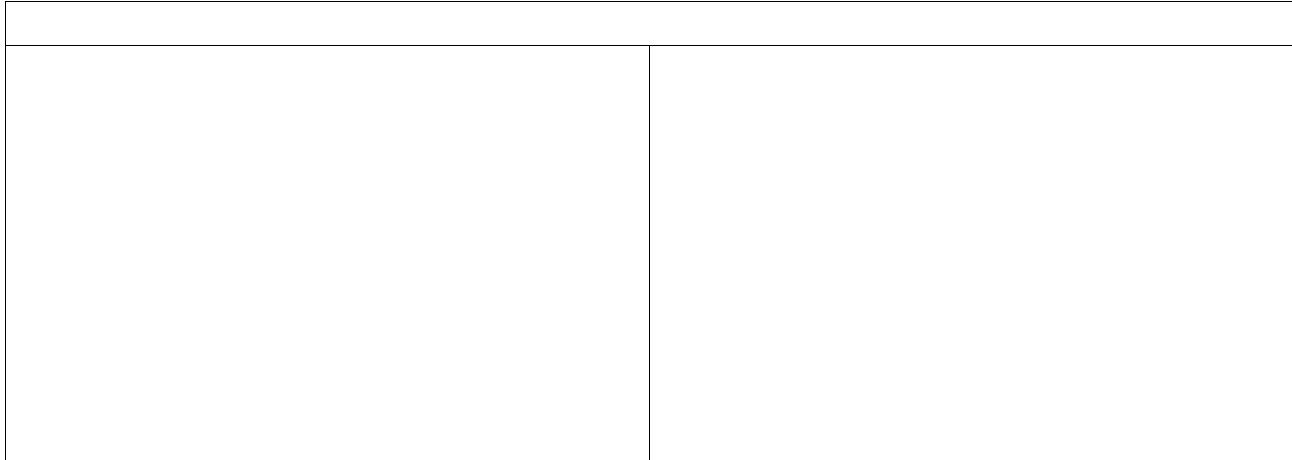
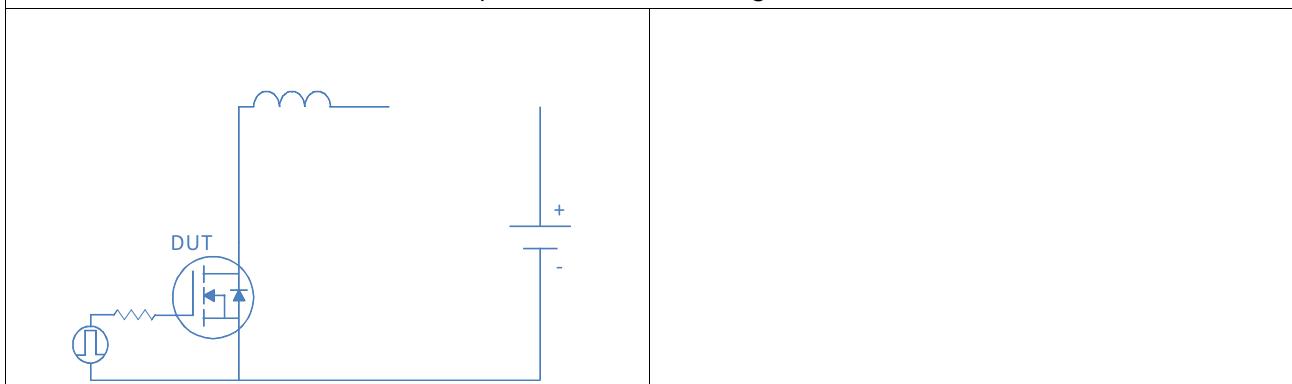
Inductive switching Test

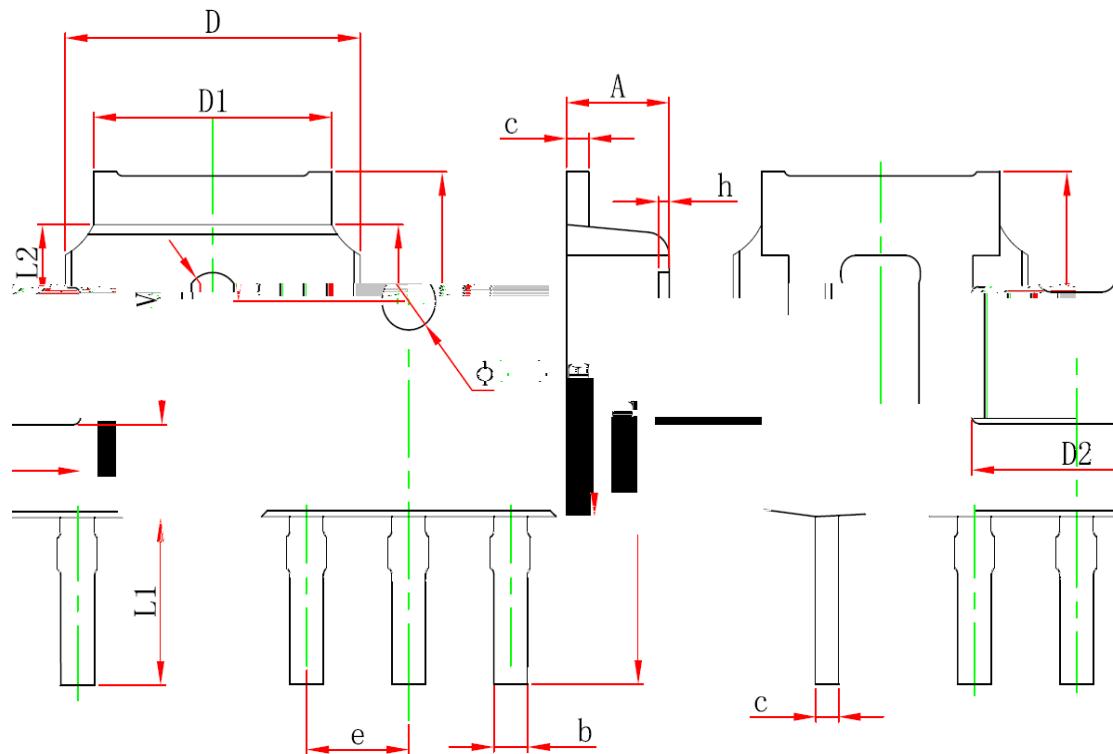


Gate Charge Test

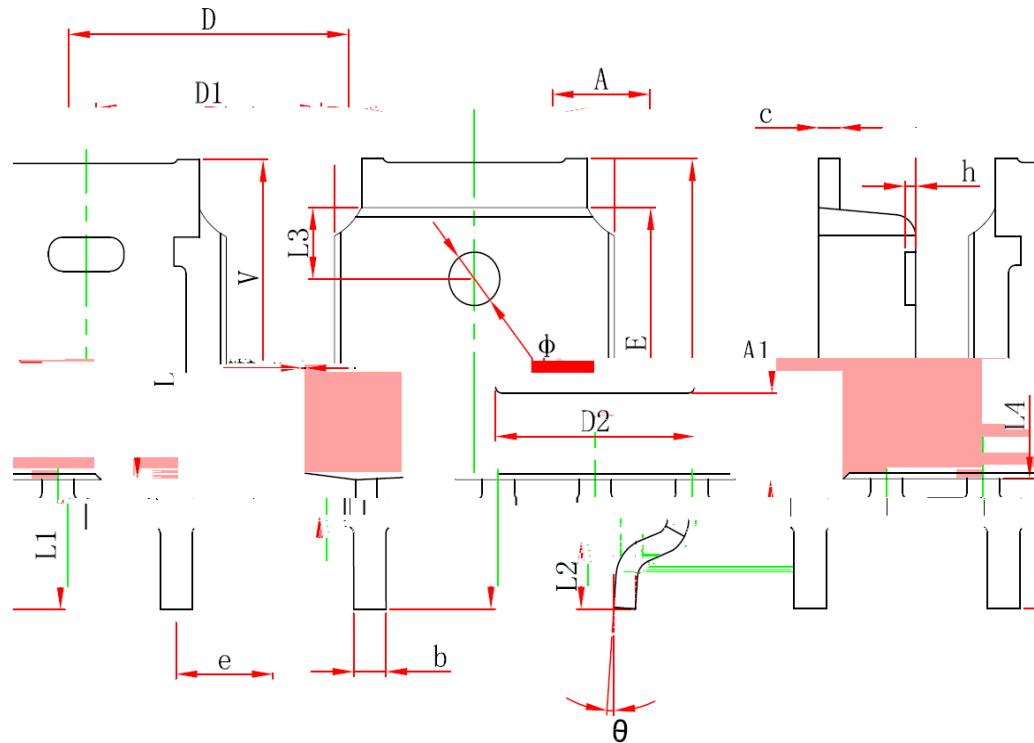


Uclamped Inductive Switching (UIS) Test



Package Outline
TO-251, 3 leads


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
h	0.660	0.860	0.026	0.034

Package Outline
TO-252, 2 leads


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Med	Max	Min	Med	Max
001	A	2.200	2.400	0.087	0.090	0.100
005	A1	0.000	0.127	0.000	0.000	0.000
034	b	0.660	0.860	0.026	0.026	0.030
023	c	0.460	0.580	0.018	0.020	0.025
0.264	D	6.500	6.700	0.256	0.260	0.270