



Main Product Characteristics:

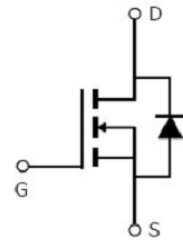
V_{DSS}	60V
$R_{DS(on)}$	70m
I_D	2.7A



SOT-23



Marking and Pin Assignments



Schematic Diagram

Features and Benefits:

- Advanced MOSFET process technology
- Special designed for PWM, load switching and general purpose applications
- Ultra low on-resistance with low gate charge
- Fast switching and reverse body recovery
- 150 operating temperature



Description:

It utilizes the latest trench processing techniques to achieve the high cell density and reduces the on-resistance with high repetitive avalanche rating. These features combine to make this design an extremely efficient and reliable device for use in power switching application and a wide variety of other applications

Absolute max Rating:

Symbol	Parameter	Max.	Units
$I_D @ TC = 25^\circ C$	Continuous Drain Current, $V_{GS} @ 10V$	2.7	A
I_{DM}	Pulsed Drain Current	10.8	
$P_D @ TC = 25^\circ C$	Power Dissipation	1.25	W
	Linear Derating Factor	0.01	W/°C
V_{DS}	Drain-Source Voltage	60	V
V_{GS}	Gate-to-Source Voltage	± 20	V
$T_J \quad T_{STG}$	Operating Junction and Storage Temperature Range	-55 to + 150	°C



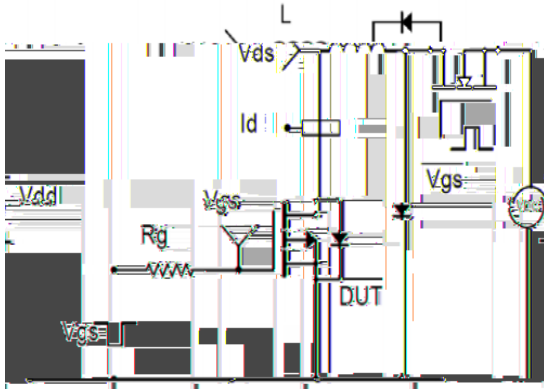
Thermal Resistance

Symbol	Characterizes	Typ.	Max.	Units
R_A	Junction-			

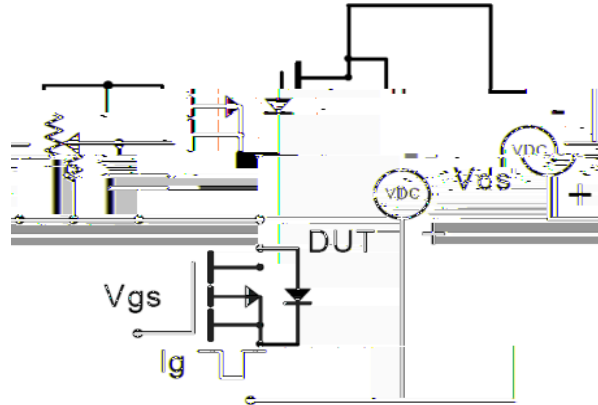


Test Circuits and Waveforms:

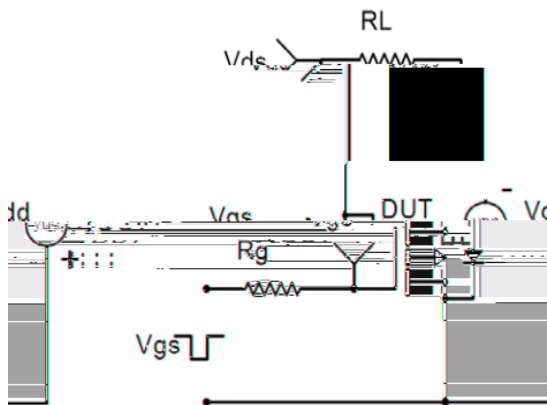
EAS Test Circuit:



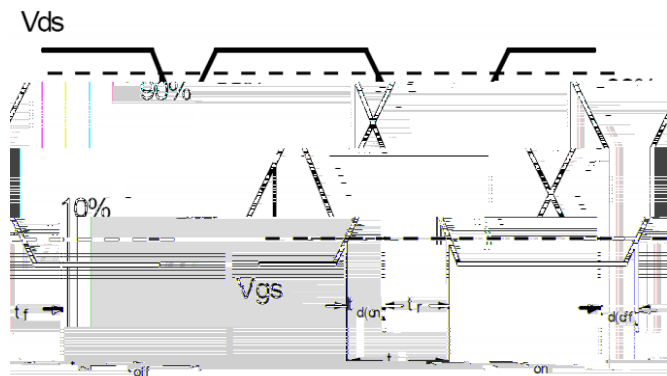
Gate Charge Test Circuit:



Switching Time Test Circuit:



Switching Waveforms:



Notes:

Calculated continuous current based on maximum allowable junction temperature.

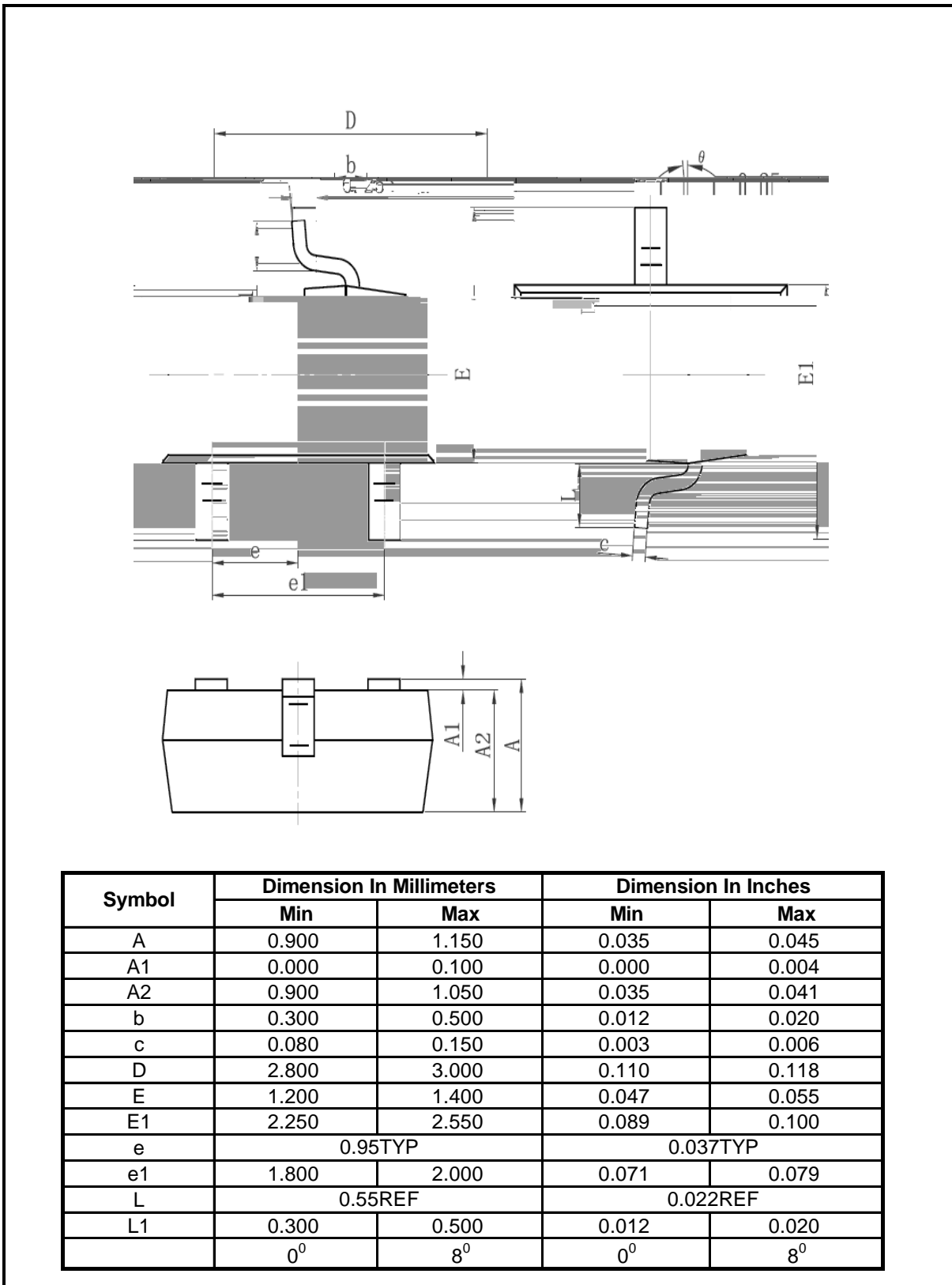
Repetitive rating; pulse width limited by max. junction temperature.

The power dissipation PD is based on max. junction temperature, using junction-to-case thermal resistance.

The value of R_A is measured with the device mounted on 1 in 2 FR-4 board with 2oz. Copper, in a still air environment with $T_A = 25^\circ\text{C}$



Mechanical Data



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