

**General Description**

It combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$. This device is ideal for load switch and battery protection applications.

Features

cell density Trench technology
 $R_{DS(ON)}$ to minimize conductive loss

Product Summary**Application**

nd Synchronous Rectifier

Ordering Information:**Absolute Maximum Ratings** $T_C = 25$

| Parameter | Symbol | Rating | Unit |
|--------------------------------|----------------|------------|------|
| Drain-Source Voltage | V_{DS} | 30 | V |
| Gate-Source Voltage | V_{GS} | ± 20 | V |
| Continuous Drain Current | $I_{D@TC=25}$ | 40 | A |
| | $I_{D@TC=75}$ | 30 | A |
| | $I_{D@TC=100}$ | 25 | A |
| Pulsed Drain Current | I_{DM} | 120 | A |
| Total Power Dissipation | $P_D@TC=25$ | 80 | W |
| Total Power Dissipation | $P_D@TA=25$ | 2.5 | W |
| Operating Junction Temperature | T_J | -55 to 150 | |
| Storage Temperature | T_{STG} | -55 to 150 | |
| Single Pulse Avalanche Energy | E_{AS} | 30 | mJ |



Fig.7 Switching Time Measurement Circuit

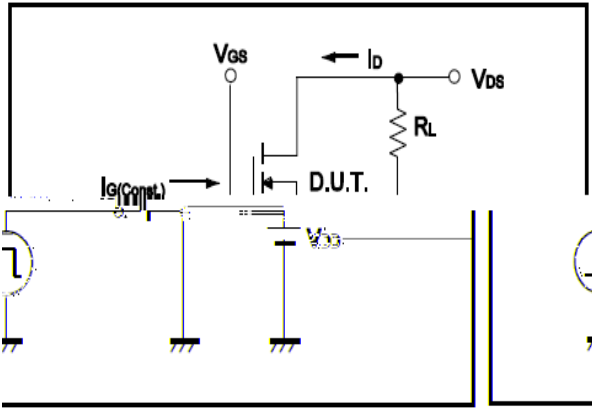


Fig.8 Gate Charge Waveform

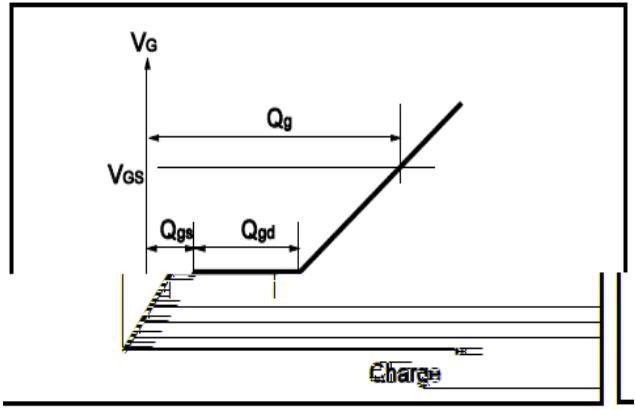


Fig.9 Switching Time Measurement Circuit

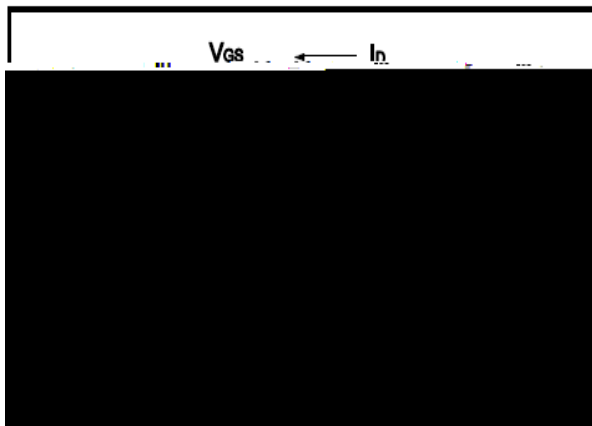


Fig.10 Gate Charge Waveform

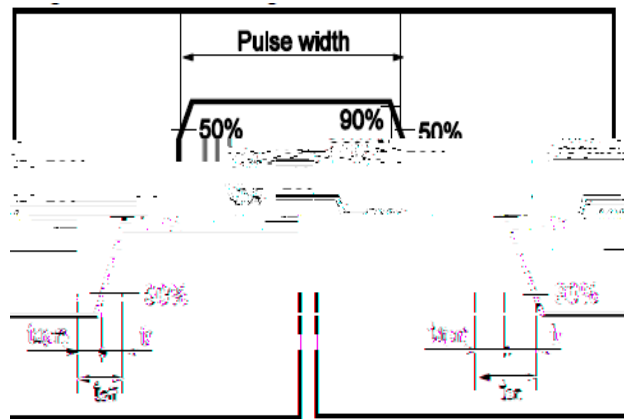


Fig.11 Avalanche Measurement Circuit

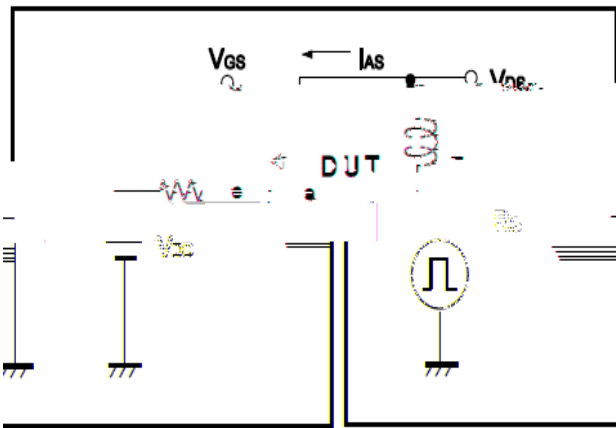
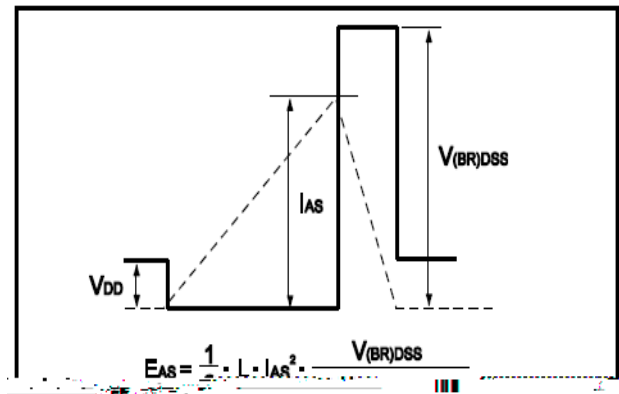


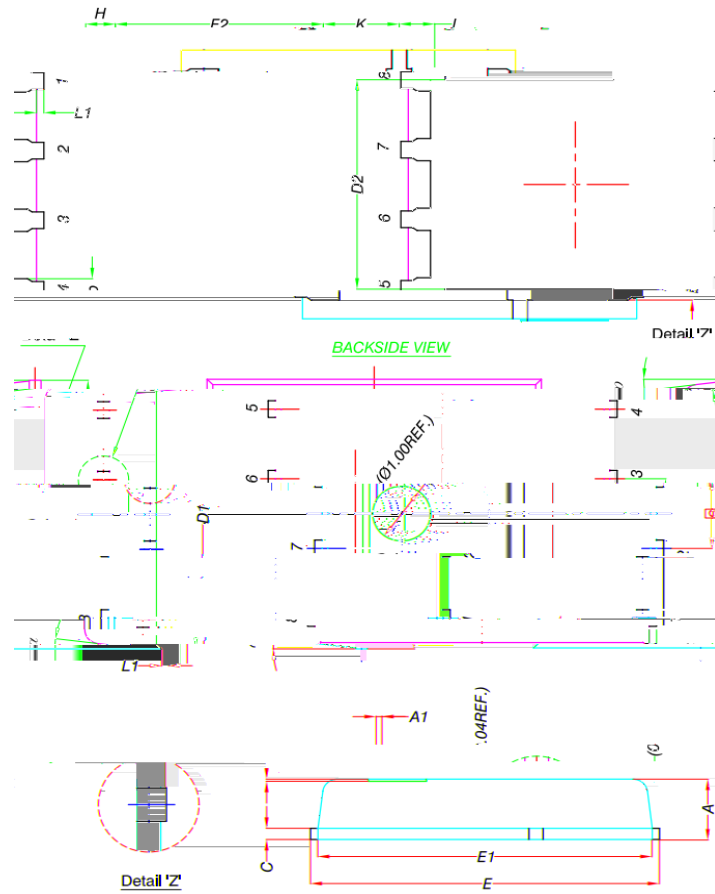
Fig.12 Avalanche Waveform





Dimensions DFN5x6

Unit mm



| DIM. | MILLIMETERS | | |
|------|-------------|------|------|
| | MIN. | NOM. | MAX. |
| A | 0.90 | 1.00 | 1.10 |
| A1 | 0 | - | 0.05 |
| b | 0.33 | 0.41 | 0.51 |
| C | 0.20 | 0.25 | 0.30 |
| D1 | 4.80 | 4.90 | 5.00 |
| D2 | 3.61 | 3.81 | 3.96 |

