



## Feature

## Pin Description

- 
- 
- 
-

## Absolute Maximum Ratings

Symbol	Parameter	Rating	Unit
<b>Common Ratings</b>			

Mounted on Large Heat Sink

---

## Electrical Characteristics (Cont.)

Symbol	Parameter	Test Conditions	HYG020N04NA1			Unit
			Min	Typ.	Max	
<b>Dynamic Characteristics</b>						
<b>Gate Charge Characteristics</b>						

## Typical Operating Characteristics

Figure 1: Power Dissipation

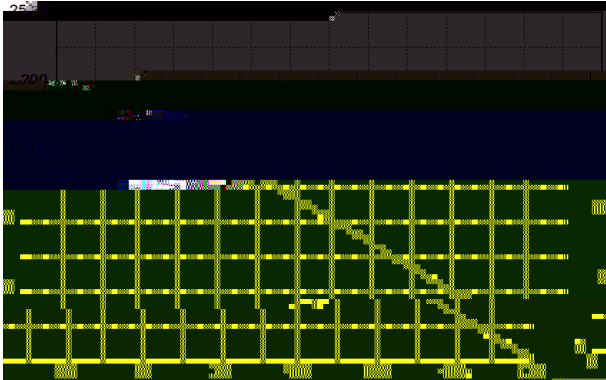


Figure 2: Drain Current

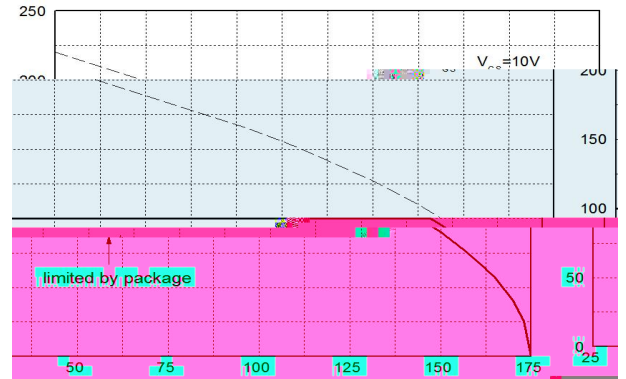


Figure 3: Safe Operation Area

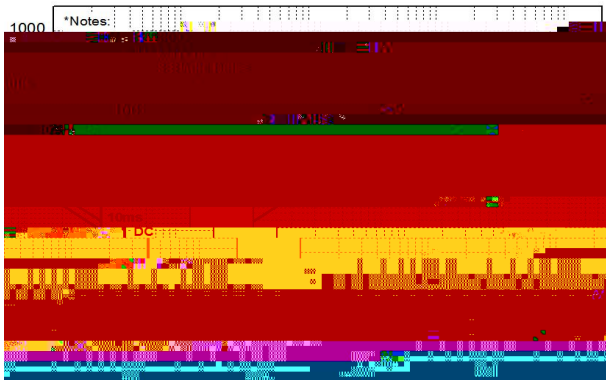
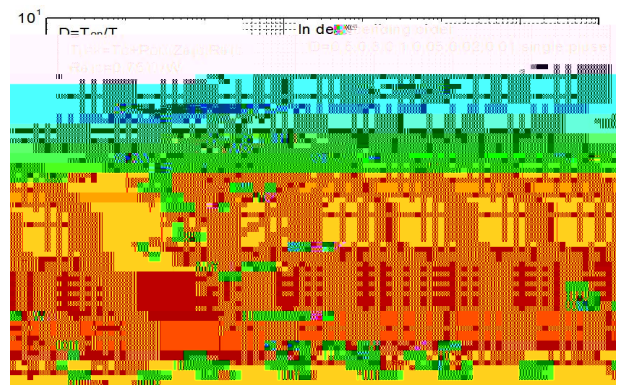


Figure 4: Thermal Transient Impedance



Maximum Effective Junction Thermal Impedance

Figure 5: Output Characteristics

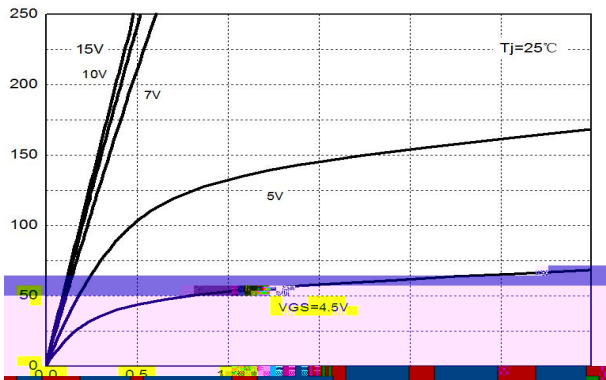
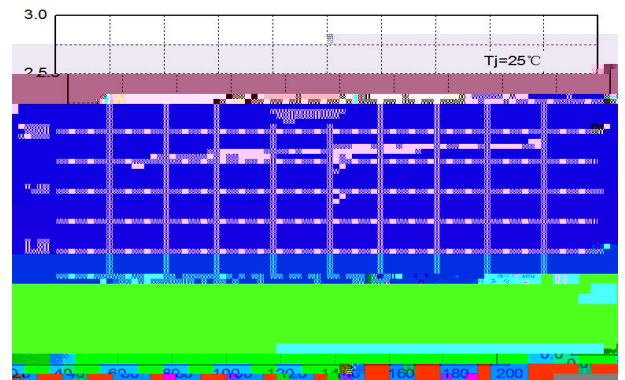


Figure 6: Drain-Source On Resistance



## **Typical Operating Characteristics(Cont.)**

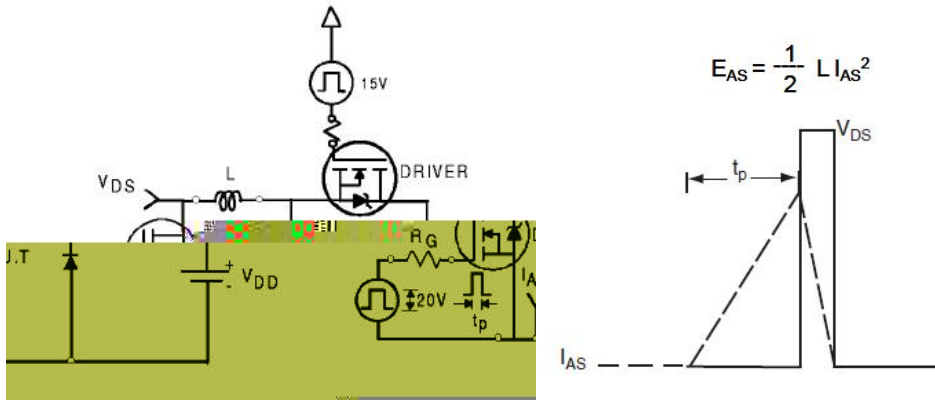
**Figure 7: On-Resistance vs. Temperature**

**Figure 8: Source-Drain Diode Forward**

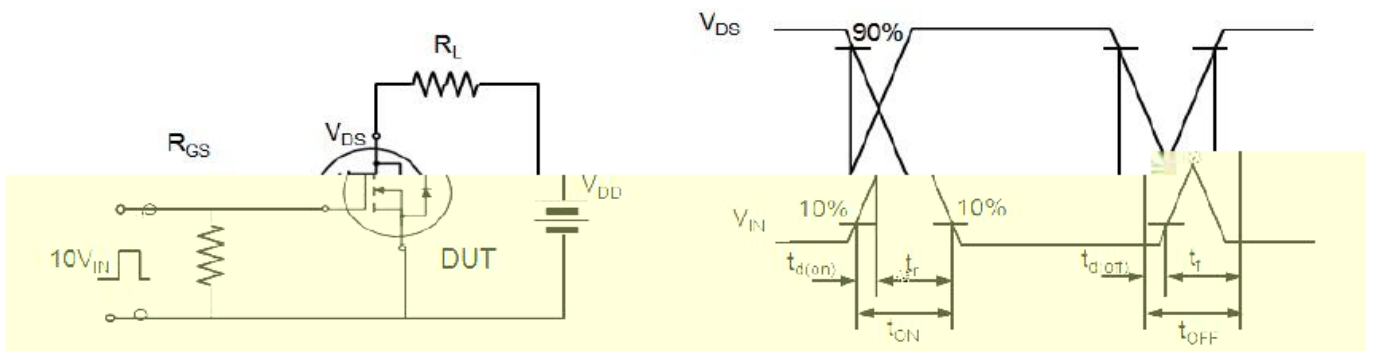
**Figure 9: Capacitance Characteristics**

**Figure 10: Gate Charge Characteristics**

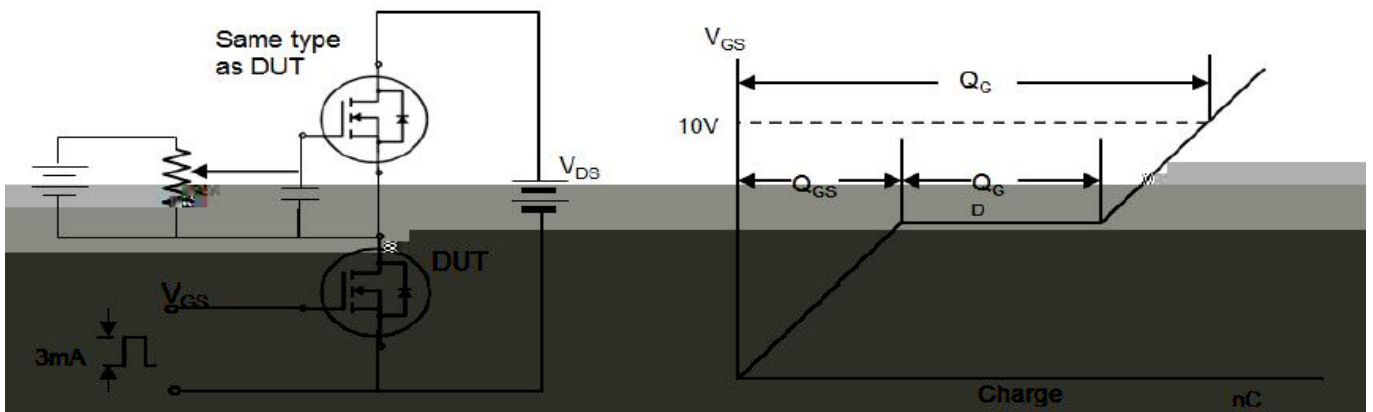
**Avalanche Test Circuit**



**Switching Time Test Circuit**



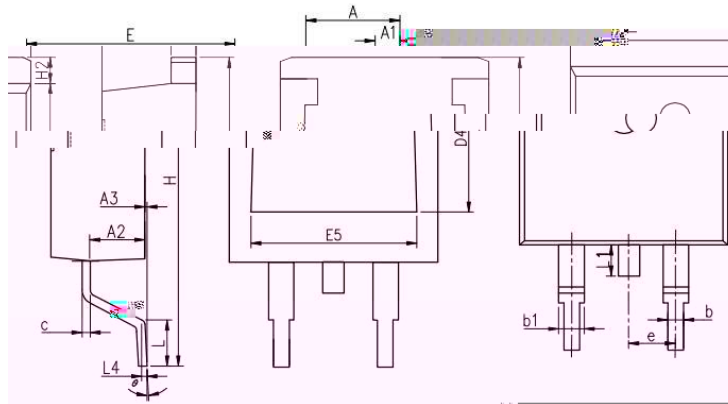
**Gate Charge Test Circuit**





Package Information

TO-263-2L



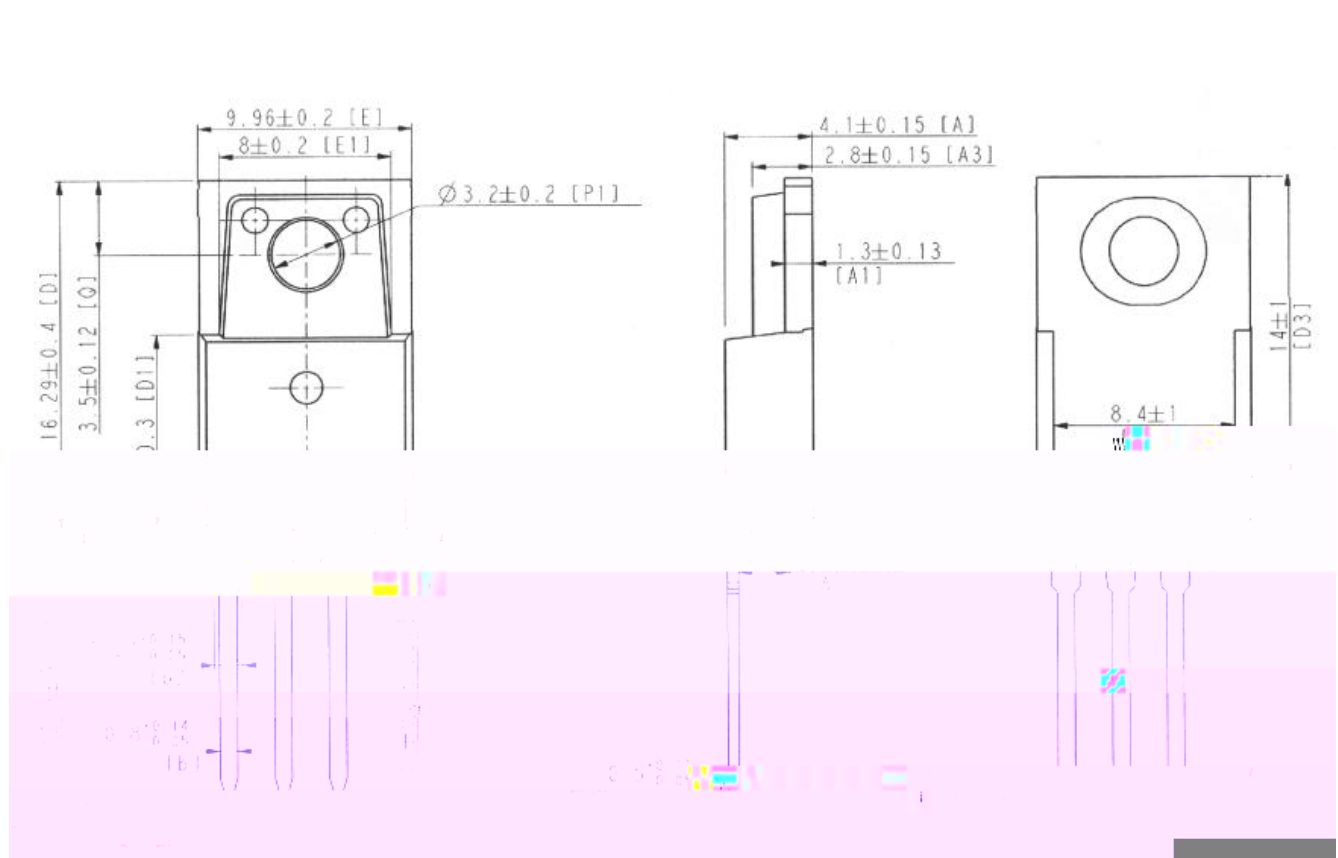
⌀  
⌀

bb

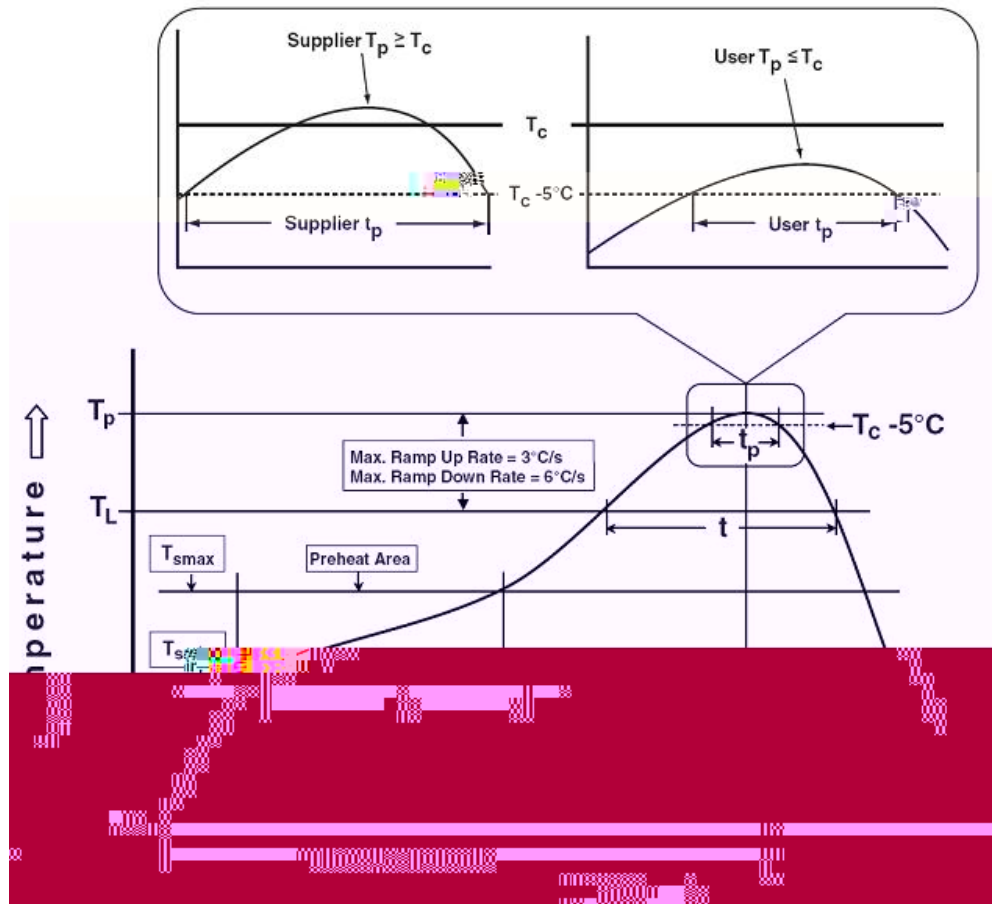


## Package Information

### TO-3PM-3L



## Classification Profile



## Classification Reflow Profiles

Profile Feature  
Preheat & Soak

Sn-Pb Eutectic Assembly

Pb-Free Assembly

Package Thickness	Volume mm <350	Volume mm 350

Package Thickness	Volume mm <350	Volume mm 350-2000	Volume mm 2000

## Reliability Test Program

Test item	Method	Description

Customer Service

---