



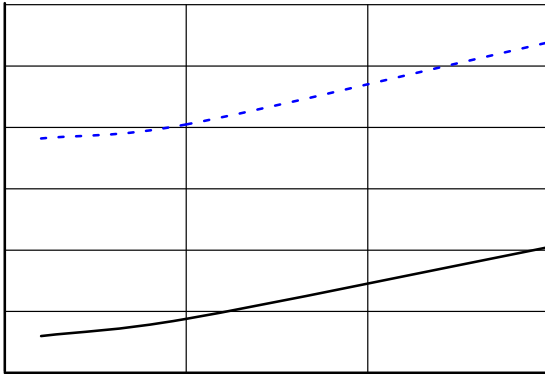
NXH50M65L4Q1SG, NXH50M65L4Q1PTG

ABSOLUTE MAXIMUM RATINGS

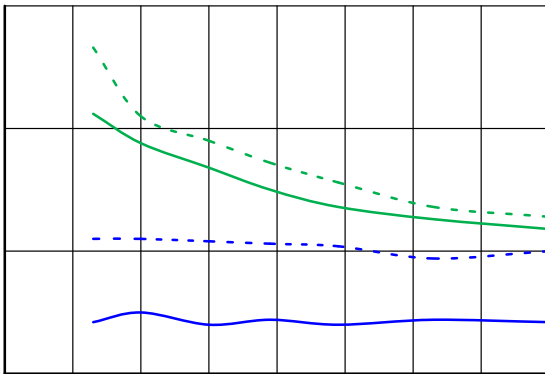
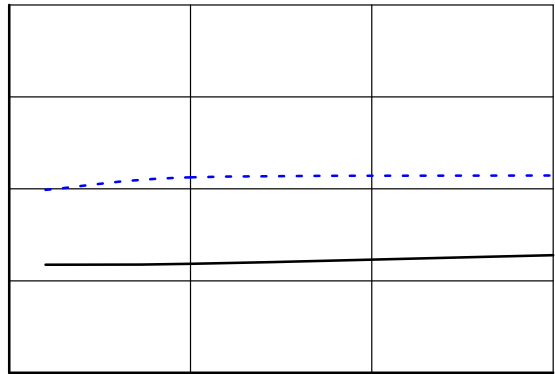
Rating	Symbol	Value	Unit
IGBT (T11, T12, T13, T14, T21, T22)			
-			
o			

NXH50M65L4Q1SG, NXH50M65L4Q1PTG

TYPICAL CHARACTERISTICS – (T11, T12, T13, T14) IGBT COMMUTATES D21, D22 DIODE



Ω



NXH50M65L4Q1SG, NXH50M65L4Q1PTG

TYPICAL CHARACTERISTICS – (T21, T22) IGBT COMMUTATES D20 DIODE

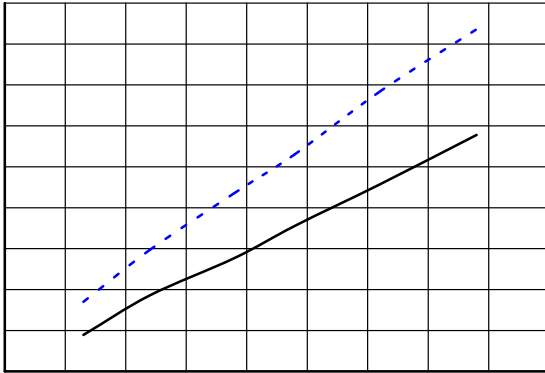


Figure 15. Typical Turn ON Loss vs. IC

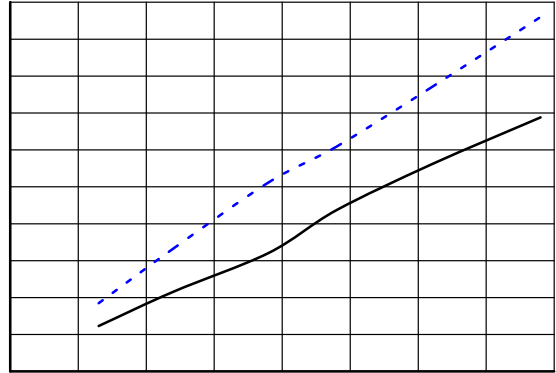


Figure 16. Typical Turn OFF Loss vs. IC



Figure 17. Typical Turn ON Loss vs. RG



Figure 18. Typical Turn OFF Loss vs. RG

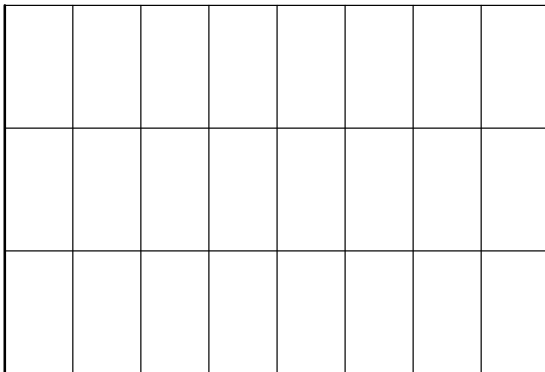


Figure 19. Typical Turn-Off Switching Time vs. IC

Figure 20. Typical Turn-On Switching Time vs. IC

NXH50M65L4Q1SG, NXH50M65L4Q1PTG

TYPICAL CHARACTERISTICS – (T21, T22) IGBT COMMUTATES D20 DIODE

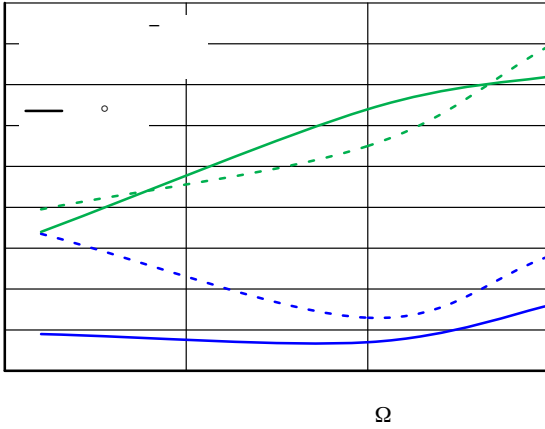


Figure 21. Typical Turn-Off Switching Time vs. Rg

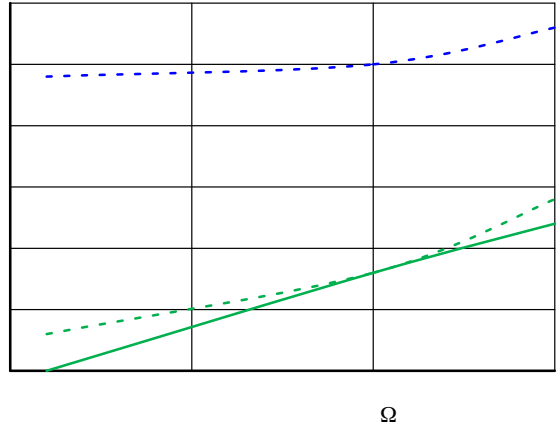


Figure 22. Typical Turn-On Switching Time vs. Rg

NXH50M65L4Q1SG, NXH50M65L4Q1PTG

TYPICAL CHARACTERISTICS – DIODE

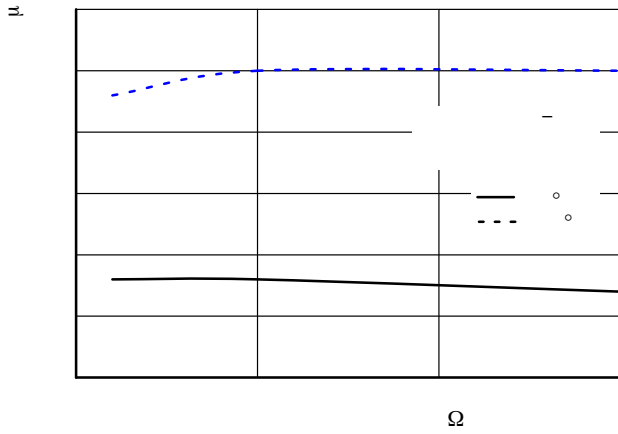


Figure 27. Typical Reverse Recovery Peak Current vs. R_g

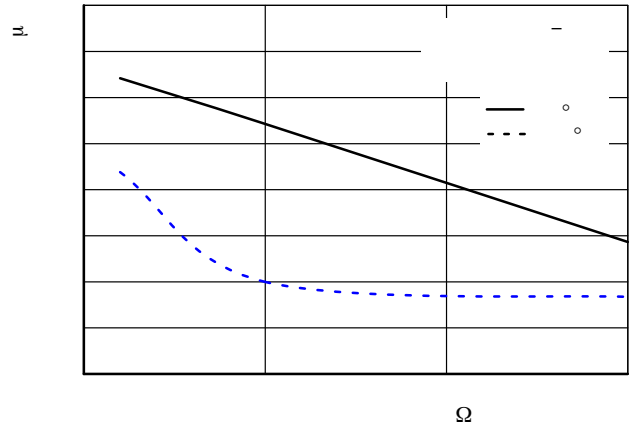


Figure 28. Typical di/dt vs. R_g

TYPICAL CHARACTERISTICS

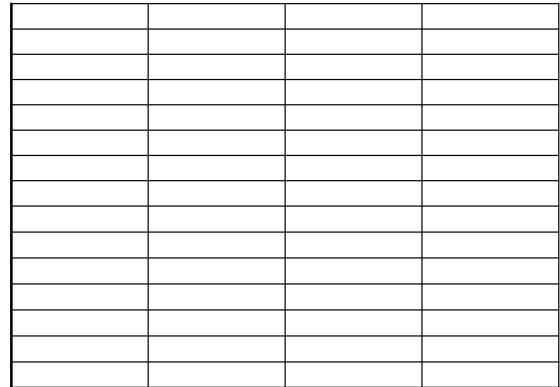


Figure 29. RBSOA Reverse Safe Operating Area

NXH50M65L4Q1SG, NXH50M65L4Q1PTG

TYPICAL THERMAL CHARACTERISTICS

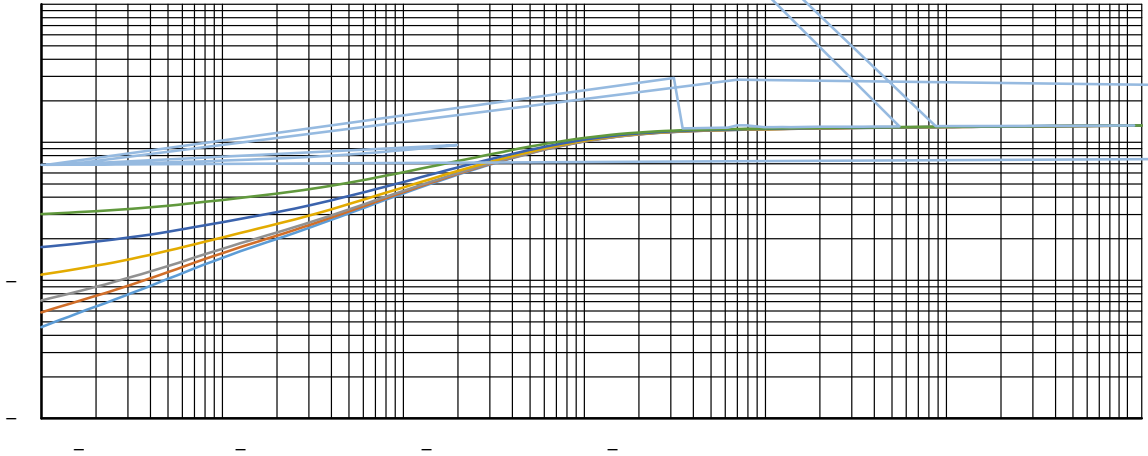


Figure 32. Transient Thermal Impedance – IGBT

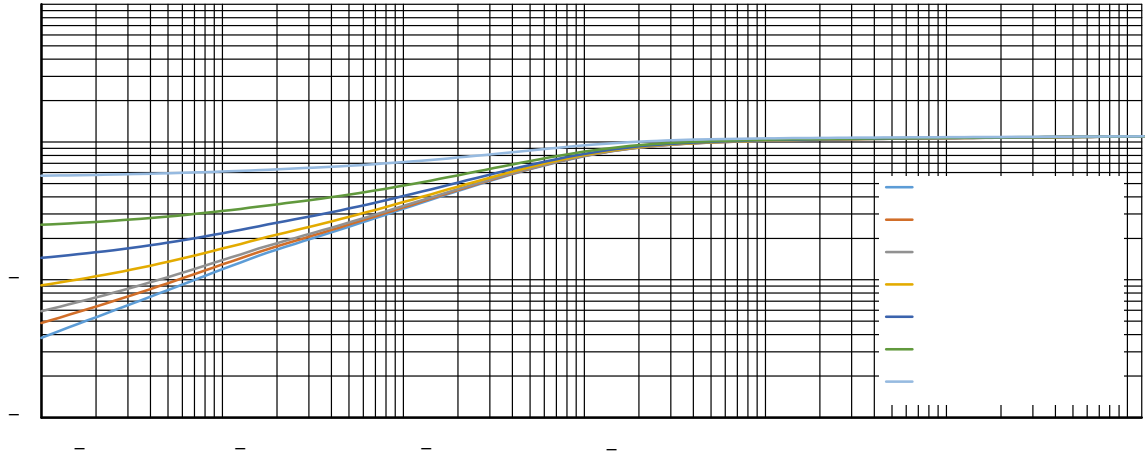
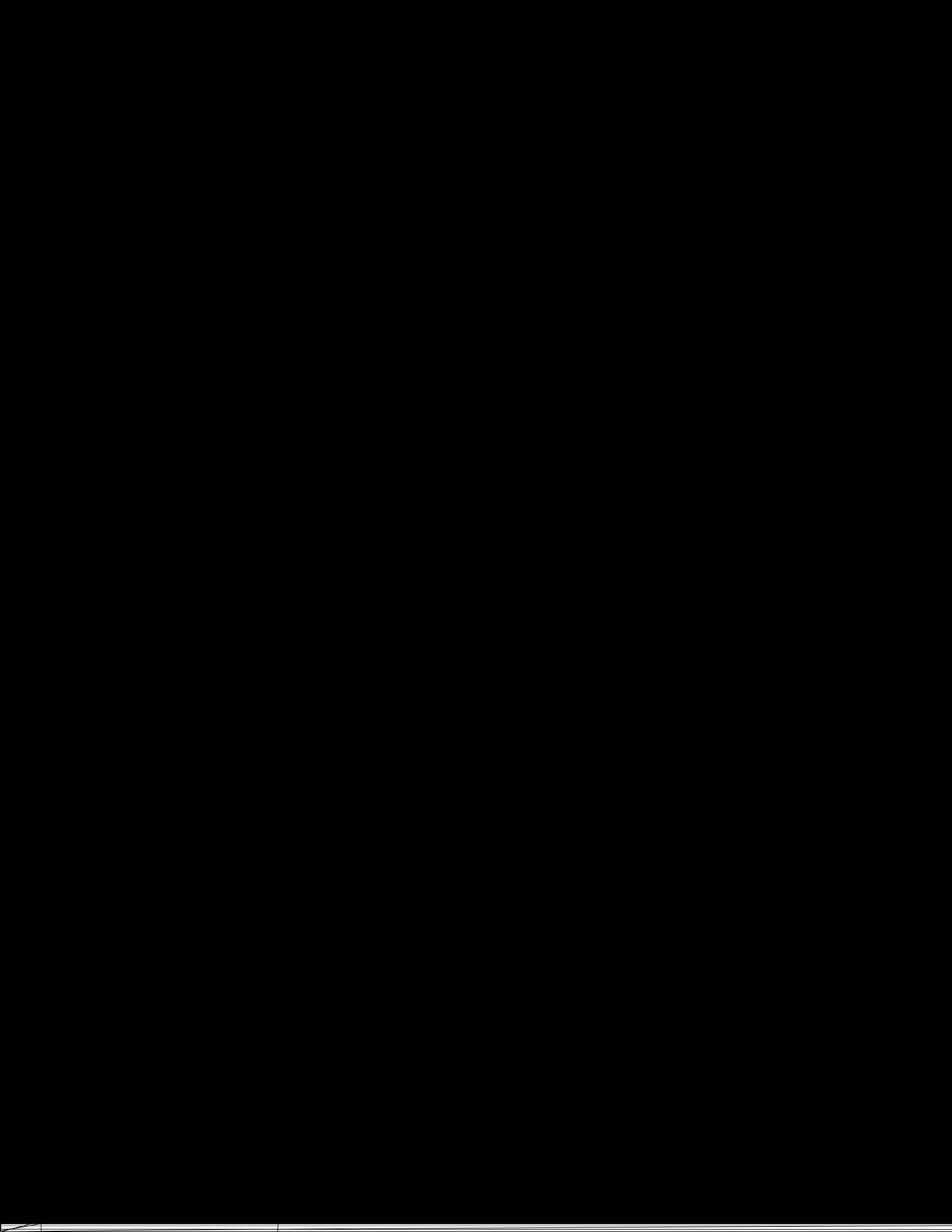
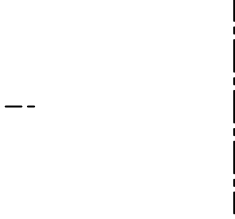


Figure 33. Transient Thermal Impedance – Diode

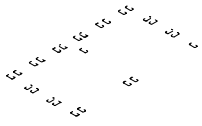


PIM27, 71x37.4 (SOLDER PIN)
CASE 180CA
ISSUE B

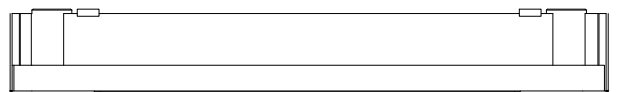
DATE 14 DEC 2022



PIM27, 71x37.4 (PRESSFIT PIN)



**GENERIC
MARKING DIAGRAM***



onsemi, **onsemi**, and other names, marks, and brands are registered and/or common law trademarks of Semiconductor Components Industries, LLC dba "**onsemi**" or its affiliates and/or subsidiaries in the United States and/or other countries. **onsemi** owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of **onsemi**'s product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. **onsemi** reserves the right to make changes at any time to any products or information herein, without notice. The information herein is provided "as-is" and **onsemi** makes no warranty, representation or guarantee regarding the accuracy of the information, product features, availability, functionality, or suitability of its products for any particular purpose, nor does **onsemi** assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using **onsemi**
