

()
 , ,
 2, -2 -

Features

- Typ. $R_{DS(on)} = 57\text{ m}\Omega$ @ $V_{GS} = 18\text{ V}$
 Typ. $R_{DS(on)} = 75\text{ m}\Omega$ @ $V_{GS} = 15\text{ V}$
- Ultra Low Gate Charge ($Q_{G(tot)} = 61\text{ nC}$)
- Low Output Capacitance ($C_{oss} = 107\text{ pF}$)
- 100% Avalanche Tested
- AEC-Q101 Qualified and PPAP Capable
- This Device is Halide Free and RoHS Compliant with exemption 7a, Pb-Free 2LI (on second level interconnection)

Typical Applications

- Automotive On Board Charger
- Automotive DC-DC Converter for EV/HEV

MAXIMUM RATINGS

| Parameter |
|-----------|
|-----------|

NVH4L075N065SC1

Table 1. THERMAL RESISTANCE MAXIMUM RATINGS

| Parameter | Symbol | Max | Unit |
|-----------|----------|-----|------|
| - - - | θ | | ° |
| - - - | θ | | |

Table 2. ELECTRICAL CHARACTERISTICS

| Parameter | Symbol | Test Condition | Min | Typ | Max | Unit |
|----------------------------|--------|----------------|-----|-----|-----|------|
| OFF CHARACTERISTICS | | | | | | |
| - - | | | | - | - | |
| - - | | ° | - | | - | ° |
| | | ° | - | - | | |

| | | | | | | |
|-----|--|---|---|---|---|---|
| | | | | | | |
| - - | | ° | - | - | - | Ω |
| | | ° | - | | | |
| | | ° | - | | - | |

= 18 V, I

NVH4L075N065SC1

Table 2. ELECTRICAL CHARACTERISTICS

| Parameter | Symbol | Test Condition | Min | Typ | Max | Unit |
|---|--------|----------------|-----|-----|-----|------|
| DRAIN-SOURCE DIODE CHARACTERISTICS | | | | | | |
| | | - | - | | - | |
| | | μ | - | | - | |
| | | | - | | - | μ |
| | | | - | | - | |
| | | | - | | - | |
| | | | - | | - | |

TYPICAL CHARACTERISTICS

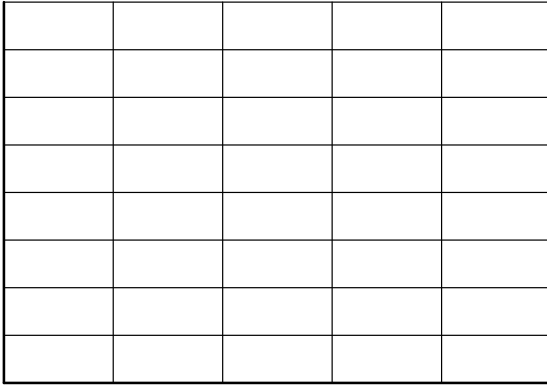


Figure 7. Gate-to-Source Voltage vs. Total Charge

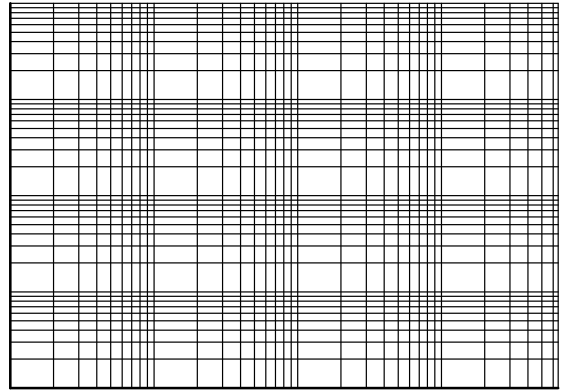
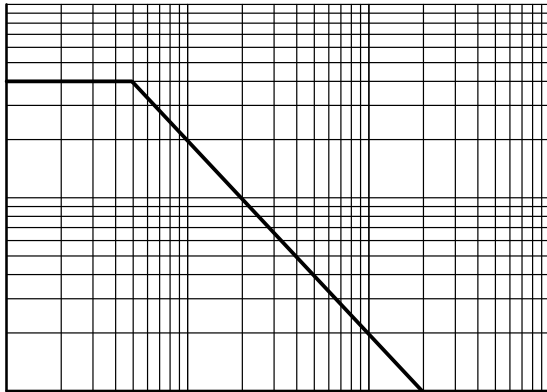
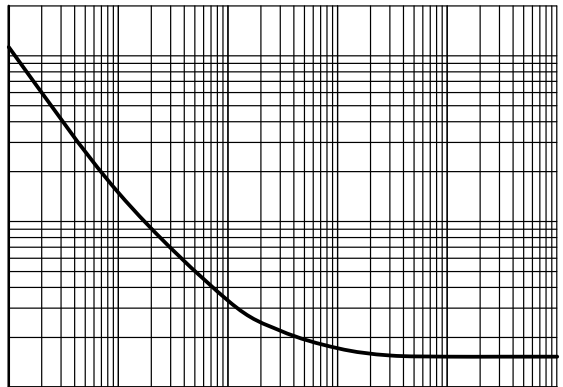
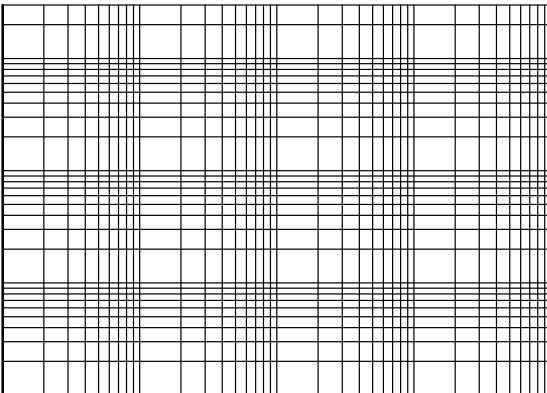
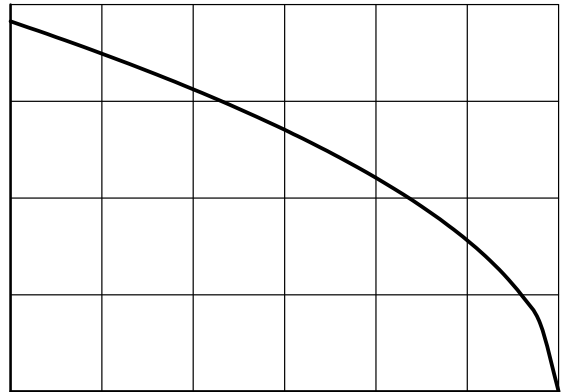


Figure 8. Capacitance vs. Drain-to-Source Voltage



NVH4L075N065SC1

TYPICAL CHARACTERISTICS

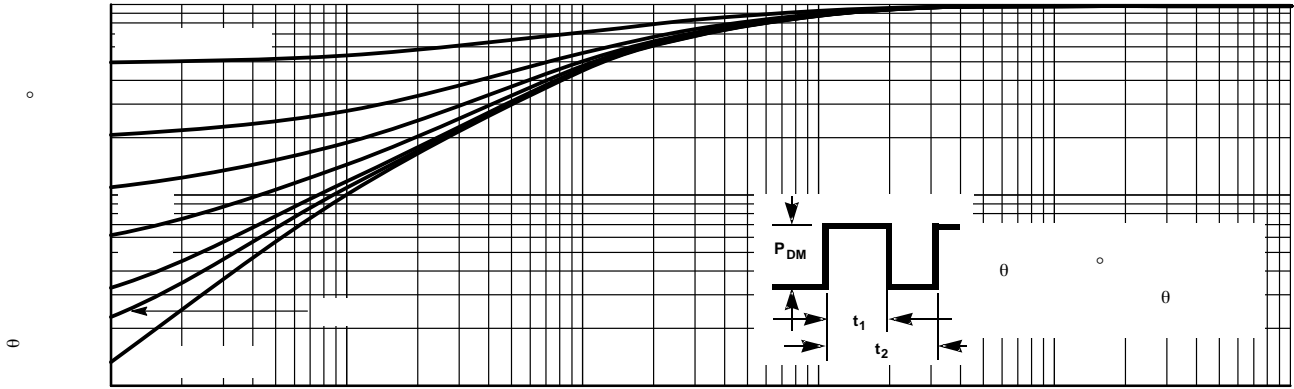


Figure 13. Junction-to-Case Thermal Response

TO-247-4LD
CASE 340CJ
ISSUE A

DATE 16 SEP 2019

A E A B
A2 E1 \emptyset p1
D2

E/2 Q

D D1

\emptyset

L1

b2 A1

b1 (3X) L

1 4

e1 b(4X) c

e 2X

\oplus 0.254 (M) B A (M)

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**
