

---

**Silicon Carbide (SiC)**  
**MO FET – Elite iC,**  
**29 mohm, 1200 V, M3 ,**  
**TO-247-4L**  
**NTH4L030N120M3**

**Features**

- Typ.  $R_{DS(on)} = 29 \text{ m}\Omega @ V$

# NTH4L030N120M3S

**Table 1. THERMAL CHARACTERISTICS**

Parameter	Symbol	Max	Unit
Junction-to-Case – Steady State (Note 1)	$R_{\theta JC}$	0.48	°C/W
Junction-to-Ambient – Steady State (Note 1)	$R_{\theta JA}$	40	



# NTH4L030N120M3S

## TYPICAL CHARACTERISTICS

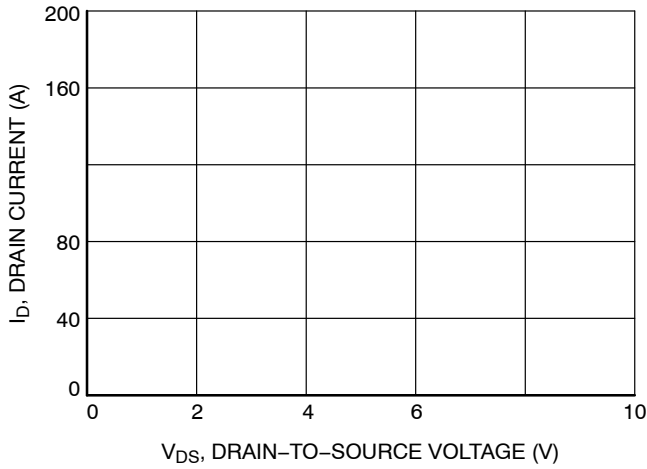


Figure 1. On-Region Characteristics

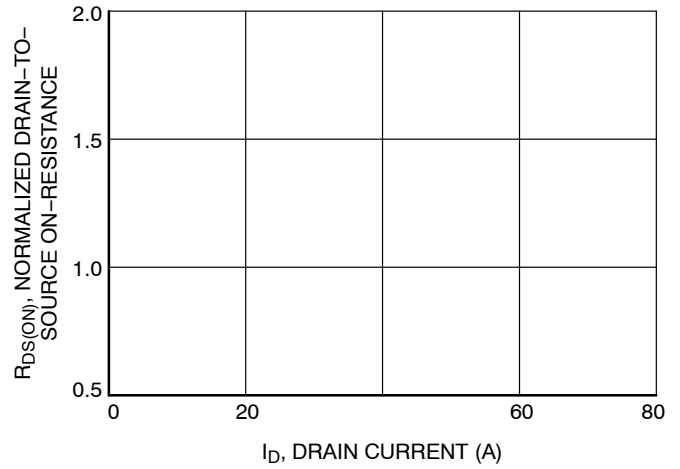


Figure 2. Normalized On-Resistance vs. Drain Current and Gate Voltage

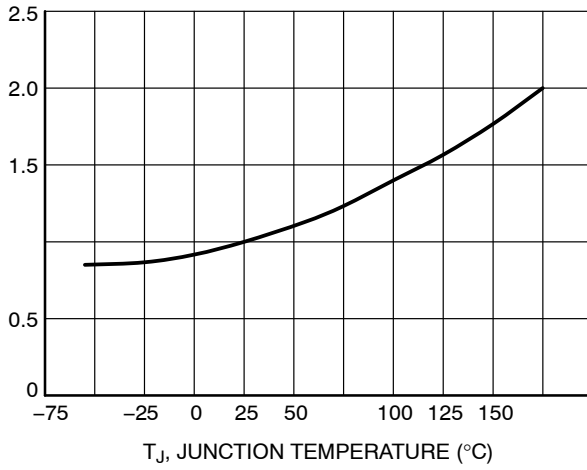


Figure 3. On-Resistance Variation with Temperature

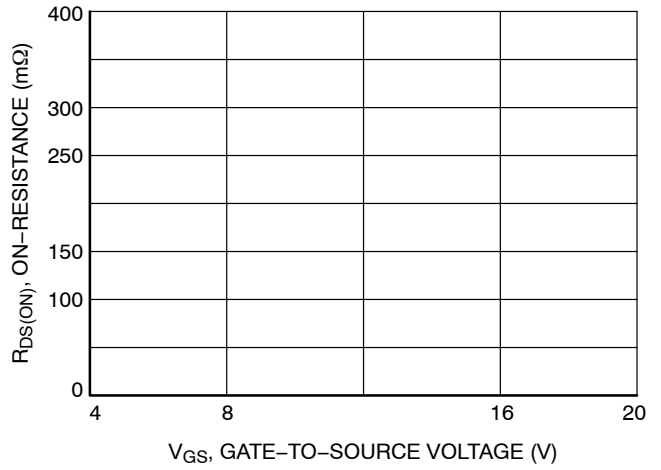


Figure 4. On-Resistance vs. Gate-to-Source Voltage

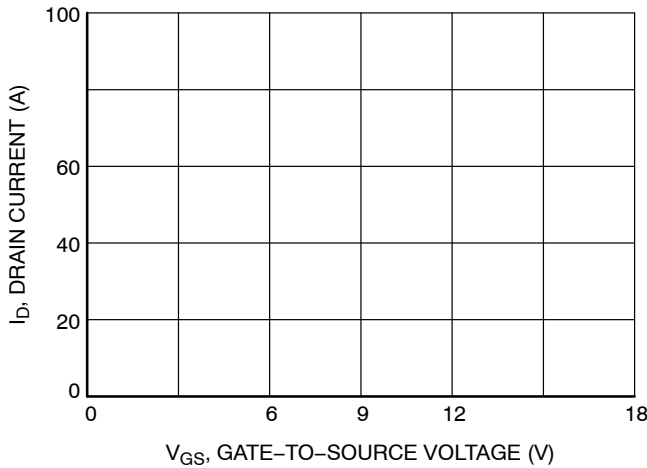


Figure 5. Transfer Characteristics

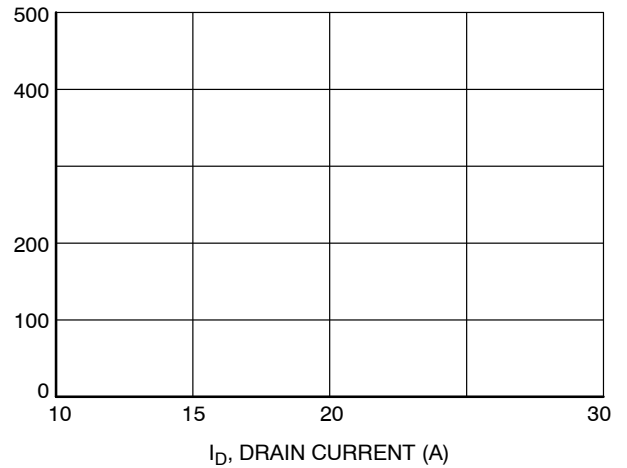


Figure 6. Switching Loss vs. Drain Current





TO-247-4LD  
CASE 340CJ  
ISSUE A

DATE 16 SEP 2019

A E A B  
A2 E1 ∅p1  
D2

E/2 Q

D D1

∅

L1

b2 A1

b1 (3X) L

1 4

e1 b(4X) c

e 2X

⊕ 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](http://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**

---

---