

Silicon Carbide (SiC) MOSFET – 80 mΩ, 1200 V, M1, TO-247-4L

NVH4L080N120SC1

Description

Silicon Carbide (SiC) MOSFET uses a completely new technology that provide superior switching performance and higher reliability compared to Silicon. In addition, the low ON resistance and compact chip size ensure low capacitance and gate charge. Consequently, system benefits include highest efficiency, faster operation frequency, increased power density, reduced EMI, and reduced system size.

Features

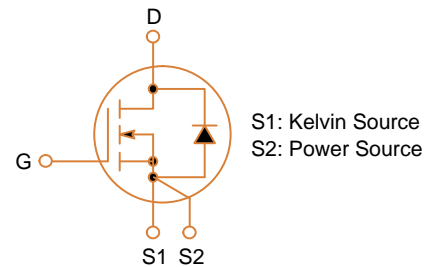
- 1200 V @ $T_J = 175^\circ\text{C}$
- Max $R_{DS(on)} = 110\text{ m}\Omega$ at $V_{GS} = 20\text{ V}$, $I_D = 20\text{ A}$
- High Speed Switching with Low Capacitance
- 100% Avalanche Tested
- AEC-Q101 Qualified and PPAP Capable
- This Device is Halide Free and RoHS Compliant with exemption 7a, Pb-Free 2LI (on second level interconnection)

Applications

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1200 V	80 mΩ	29 A
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N CHANNEL MOSFET



D
S2
S1 G
TO 247 4LD
CASE 340CJ

MARKING DIAGRAM



A = Assembly Location
Y = Year
WW = Work Week
ZZ = Lot Traceability
NVH4L080N120SC1 = Specific Device Code

ORDERING INFORMATION

Device	Package	Shipping
NVH4L080N120SC1	TO-247-4L	30 Units / Tube

NVH4L080N120SC1

ELECTRICAL CHARACTERISTICS ($T_C = 25^\circ$)

NVH4L080N120SC1

NVH4L080N120SC1

TYPICAL CHARACTERISTICS $T_J = 25^\circ\text{C}$ unless otherwise noted (continued)

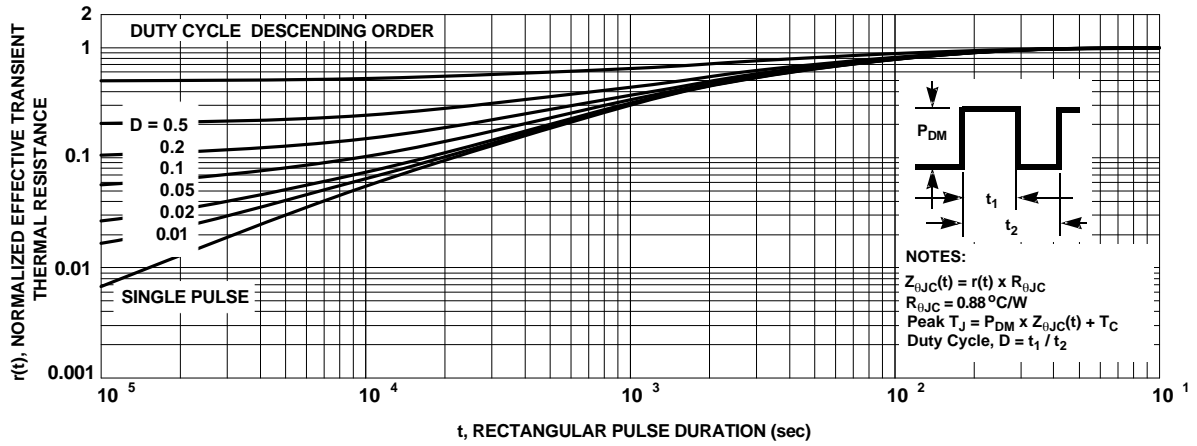


Figure 13. Junction to Case Transient Thermal Response Curve

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)

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