

SPICE Model Parameters

Copy this code from the SPICE model into a SPICE software program for simulation of the 1N8031-GA.

```
*      MODEL OF GeneSiC Semiconductor Inc.
*
*      $Revision:   1.0           $
*      $Date:      05-SEP-2013   $
*
*      GeneSiC Semiconductor Inc.
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*      Dulles, VA 20166
*
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*
*      These models are provided "AS IS, WHERE IS, AND WITH NO WARRANTY
*      OF ANY KIND EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED
*      TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A
*      PARTICULAR PURPOSE."
*      Models accurate up to 2 times rated drain current.
*
*      Start of 1N8031-GA SPICE Model
*
.SUBCKT 1N8031 ANODE KATHODE
D1 ANODE KATHODE 1N8031_25C; Call the Schottky Diode Model
D2 ANODE KATHODE 1N8031_PIN; Call the PiN Diode Model
.MODEL 1N8031_25C D
+ IS      3.57E-18      RS      0.49751
+ TRS1    0.0057      TRS2    2.40E-05
+ N       1           IKF     322
+ EG      1.2         XTI     3
+ CJO     9.12E-11    VJ      0.371817384
+ M       1.527759838 FC      0.5
+ TT      1.00E-10    BV      650
+ IBV     1.00E-03    VPK     650
+ IAVE    1           TYPE    SiC_Schottky
+ MFG     GeneSiC_Semiconductor
.MODEL 1N8031_PIN D
+ IS      5.73E-11    RS      0.72994
+ N       5           IKF     800
+ EG      3.23        XTI     -14
+ FC      0.5         TT      0
+ BV      650         IBV     1.00E-03
+ VPK     650         IAVE    1
+ TYPE    SiC_PiN
.ENDS
*
*      End of 1N8031-GA SPICE Model
```