

SPICE Model Parameters

Copy the following code into a SPICE software program for simulation of the 1N8034-GA device.

```
*      MODEL OF GeneSiC Semiconductor Inc.
*
*      $Revision:   1.0           $
*      $Date:      05-SEP-2013    $
*
*      GeneSiC Semiconductor Inc.
*      43670 Trade Center Place Ste. 155
*      Dulles, VA 20166
*      http://www.genesicsemi.com/index.php/hit-sic/schottky
*
*      COPYRIGHT (C) 2013 GeneSiC Semiconductor Inc.
*      ALL RIGHTS RESERVED
*
*      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 1N8034-GA SPICE Model
*
.SUBCKT 1N8034 ANODE KATHODE
D1 ANODE KATHODE 1N8034_25C; Call the Schottky Diode Model
D2 ANODE KATHODE 1N8034_PIN; Call the PiN Diode Model
.MODEL 1N8034_25C D
+ IS      8.46E-17      RS      0.0319
+ N       1            IKF     1000
+ EG      1.2          XTI     3
+ TRS1    0.0038       TRS2    3.00E-05
+ CJO     1.26E-09     VJ      0.438
+ M       1.5278       FC      0.5
+ TT      1.00E-10     BV      650
+ IBV     1.00E-03     VPK     650
+ IAVE    20           TYPE    SiC_Schottky
+ MFG     GeneSiC_Semiconductor
.MODEL 1N8034_PIN D
+ IS      2.77E-10     RS      0.086693
+ N       3.3505       IKF     3.67E-06
+ EG      3.23         XTI     -10
+ FC      0.5          TT      0
+ BV      650          IBV     1.00E-03
+ VPK     650          IAVE    20
+ TYPE    SiC_PiN
.ENDS
*
*      End of 1N8034-GA SPICE Model
```