

Section VIII: SPICE Model Parameters

This is a secure document. Please copy this code from the SPICE model PDF file on our website (http://www.genesicsemi.com/images/hit_sic/baredie/sjt/GA10JT12-CAL_SPICE.pdf) into LTSPICE (version 4) software for simulation of the GA10JT12-CAL.

```
*      MODEL OF GeneSiC Semiconductor Inc.
*
*      $Revision:   2.2           $
*      $Date:      26-FEB-2016   $
*
*      GeneSiC Semiconductor Inc.
*      43670 Trade Center Place Ste. 155
*      Dulles, VA 20166
*
*      COPYRIGHT (C) 2015 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.
*
.model GA10JT12 NPN
+ IS      9.833E-48
+ ISE     1.073E-26
+ EG      3.23
+ BF      87
+ BR      0.55
+ IKF     5000
+ NF      1
+ NE      2
+ RB      4.67
+ IRB     0.001
+ RBM     0.16
+ RE      0.005
+ RC      0.08
+ CJC     229.9E-12
+ VJC     3.22
+ MJC     0.492
+ CJE     1244E-9
+ VJE     2.86
+ MJE     0.465
+ XTI     3
+ XTB     -1.35
+ TRC1    7E-3
+ VCEO    1200
+ ICRATING 10
+ MFG     GeneSiC_Semiconductor
*
*      End of GA10JT12 SPICE Model
```