

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/GA05JT12-CAL_SPICE.pdf) into LTSPICE (version 4) software for simulation of the GA05JT12-CAL.

```
*      MODEL OF GeneSiC Semiconductor Inc.
*
*      $Revision:   2.1                $
*      $Date:      29-JAN-2015         $
*
*      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 GA05JT12 NPN
+ IS      9.8338E-48
+ ISE     1.0733E-26
+ EG      3.23
+ BF      92
+ BR      0.55
+ IKF     5000
+ NF      1
+ NE      2
+ RB      10.49
+ IRB     0.002
+ RBM     0.32
+ RE      0.003
+ RC      0.18
+ CJC     230E-12
+ VJC     3.438
+ MJC     0.498
+ CJE     568E-12
+ VJE     2.862
+ MJE     0.458
+ XTI     3
+ XTB     -1.5
+ TRC1    6.5E-3
+ VCEO    1200
+ ICRATING 5
+ MFG     GeneSiC_Semiconductor
*
*      End of GA05JT12 SPICE Model
```