

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/GA50JT12-CAL_SPICE.pdf) into LTSPICE (version 4) software for simulation of the GA50JT12-CAL.

```
*      MODEL OF GeneSiC Semiconductor Inc.
*
*      $Revision:    2.3                $
*      $Date:       26-FEB-2016        $
*
*      GeneSiC Semiconductor Inc.
*      43670 Trade Center Place Ste. 155
*      Dulles, VA 20166
*
*      COPYRIGHT (C) 2016 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 GA50JT12 NPN
+ IS      9.833E-48
+ ISE     1.073E-26
+ EG      3.23
+ BF      89
+ BR      0.55
+ IKF     9000
+ NF      1
+ NE      2
+ RB      0.95
+ IRB     0.005
+ RBM     0.073
+ RE      0.004
+ RC      0.0125
+ CJC     2.124E-9
+ VJC     3.788
+ MJC     0.537
+ CJE     6.026E-09
+ VJE     3.1791
+ MJE     0.5295
+ XTI     3
+ XTB     -1.5
+ TRC1    9.00E-3
+ VCEO    1200
+ ICRATING 50
+ MFG     GeneSiC_Semiconductor
*
*      End of GA50JT12 SPICE Model
```