

**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/GA20JT12-CAL\\_SPICE.pdf](http://www.genesicsemi.com/images/hit_sic/baredie/sjt/GA20JT12-CAL_SPICE.pdf)) into LTSPICE (version 4) software for simulation of the GA20JT12-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) 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 GA20JT12 NPN
+ IS      9.833E-48
+ ISE     1.073E-26
+ EG      3.23
+ BF      88
+ BR      0.55
+ IKF     5000
+ NF      1
+ NE      2
+ RB      3.09
+ IRB     0.006
+ RBM     0.101
+ RE      0.005
+ RC      0.035
+ CJC     910E-12
+ VJC     3.2509
+ MJC     0.51624
+ CJE     2.77e-9
+ VJE     2.896
+ MJE     0.472
+ XTI     3
+ XTB     -1.5
+ TRC1    8.500E-3
+ VCEO    1200
+ ICRATING 20
+ MFG     GeneSiC_Semiconductor
*
*      End of GA20JT12 SPICE Model
```