

## Section VII: SPICE Model Parameters

Please copy this code from the SPICE model PDF file on our website ([http://www.genesicsemi.com/images/hit\\_sic/sjt/2N7640-GA\\_SPICE.pdf](http://www.genesicsemi.com/images/hit_sic/sjt/2N7640-GA_SPICE.pdf)) into LTSPICE (version 4) software for simulation of the 2N7640-GA.

```
*      MODEL OF GeneSiC Semiconductor Inc.
*
*      $Revision: 1.3          $
*      $Date: 12-DEC-2014    $
*
*      GeneSiC Semiconductor Inc.
*      43670 Trade Center Place Ste. 155
*      Dulles, VA 20166
*
*      COPYRIGHT (C) 2014 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 2N7640 NPN
+ IS      9.8338E-48
+ ISE     1.0733E-26
+ EG      3.23
+ BF      110
+ BR      0.55
+ IKF     200
+ NF      1.02
+ NE      2.0
+ RB      2.6
+ IRB     0.002
+ RBM     0.16
+ RE      0.01
+ RC      0.045
+ CJC     8.2281E-10
+ VJC     3.31126
+ MJC     0.48117
+ CJE     2.33957E-9
+ VJE     2.91486
+ MJE     0.48211
+ XTI     3
+ XTB     -1.2
+ TRC1    6.20E-03
+ VCEO    600
+ ICRATING 32
+ MFG     GeneSiC_Semiconductor
*
* End of 2N7640-GA SPICE Model
```