



No error

M file of Comsol Busbar Heat model

Ans

```
Command Window
New to MATLAB? Watch this Video, see Demos, or read Getting Started.

MATLAB desktop keyboard shortcuts, such as Ctrl+S, are now customizable.
In addition, many keyboard shortcuts have changed for improved consistency
across the desktop.

To customize keyboard shortcuts, use Preferences. From there, you can also
restore previous default settings by following the steps outlined in Help.

Click here if you do not want to see this message again.

ans =
Type: Root
Tag: Model
Identifier: root

fx >>
```

```
Workspace
Name Value Min Max
ans <1x1 com.comsol.m...
```

```
Editor - C:\Users\owner\Desktop\comsol\ayel\busbar_M.m
File Edit Text Go Cell Tools Debug Desktop Window Help
Stack Base fx
1 function out = model
2 %
3 % busbar_M.m
4 %
5 % Model exported on Apr 15 2011, 19:11 by COMSOL 4.1.0.88.
6
7 import com.comsol.model.*
8 import com.comsol.model.util.*
9
10 model = ModelUtil.create('Model');
11
12 model.modelPath('C:\Users\owner\Desktop\comsol_ayel');
13
14 model.modelNode.create('model');
15
16 model.geom.create('geom1', 3);
17
18 model.mesh.create('mesh1', 'geom1');
19
20 model.physics.create('jsb', 'JouleHeating', 'geom1', {'I1' 'I2' 'I3' 'I4' 'I5' 'I6' 'I7' 'I8' 'I9' 'I10' 'I11' 'I12' 'I13' 'I14' 'I15' 'I16' 'I17' 'I18' 'I19' 'I20' 'I21' 'I22' 'I23' 'I24'});
21
22 model.study.create('stud1');
23 model.study('stud1').feature.create('stsb', 'Stationary');
24
25 model.param.set('L', '6[cm]');
26 model.param.descr('L', 'length of lower part');
27 model.param.set('rad_1', '6[mm]');
28 model.param.descr('rad_1', 'Radius');
29 model.param.descr('rad_2', 'radius of hole');
30 model.param.set('hbb', '8[mm]');
31 model.param.descr('hbb', 'thickness of busbar');
32 model.param.set('vbb', '5[cm]');
33 model.param.set('hbb', '6[mm]');
34 model.param.descr('hbb', 'mesh');
35 model.param.set('hbc', '5[W/m^2/K]');
36 model.param.descr('hbc', 'heat transfer coefficient');
37 model.param.set('V0cc', '20[mV]');
38 model.param.descr('V0cc', 'voltage on busbar');
39
40 model.geom('geom1').run;
41 model.geom('geom1').run('');
42 model.geom('geom1').feature.create('wpl', 'WorkPlane');
43 model.geom('geom1').feature('wpl').set('quickplane', 'xy');
44
45 model.view('view2').axis.set('xmin', '-1e-2');
46 model.view('view2').axis.set('xmax', '0.11');
47 model.view('view2').axis.set('ymin', '-1e-2');
48 model.view('view2').axis.set('ymax', '0.11');
49 model.view('view2').axis.set('normaldir', 'z');
50 model.view('view2').axis.set('spacing', '5e-2');
51 model.view('view2').axis.set('yspacing', '5e-2');
52 model.view('view2').axis.set('xmin', '-1e-2');
53 model.view('view2').axis.set('ymin', '-1e-2');
54 model.view('view2').axis.set('ymax', '0.11');
55
56 model.geom('geom1').feature('wpl').geom.feature.create('r1', 'Rectangle');
57 model.geom('geom1').feature('wpl').geom.feature('r1').setIndex('size', '1e2*hbb', 0);
58 model.geom('geom1').feature('wpl').geom.feature('r1').setIndex('size', '1e2*hbb', 1);
```

Inspector: Model...	
defaultName	Root
displayString	busbar.mph...
entityAuthor	null
entityComme...	null
entityCreation...	0
entityModified...	null
entityModifyTi...	0
entityName	busbar.m...
entityVersion	null
fontfamily	"default"
fontsize	9
guiModelFile	null
inModel	<input checked="" type="checkbox"/> On
maxGeomIndex	null
modelImageN...	null
modelPath	C:\Users\...
referenceTag	Model
removable	<input type="checkbox"/> Off
retagable	<input checked="" type="checkbox"/> On
savePoint	<input type="checkbox"/> Off
savedInVersion	101

Select a file to view details