

## LT1115 Macromodel

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* Linear Technology LT1115 op amp model
* Written: 11-28-1989 Type: Bipolar npn input, internal comp.
* Typical specs:
*   Ref. LT1115 data sheet, LTC Dec 1989
* Comments:
*   Uses extended phase compensation; input differential mode clamp.
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* Connections: + - V+V-0
.subckt LT1115 3 2 7 4 6
rc1 7 80 7.0736E+01
rc2 7 90 7.0736E+01
q1 80 2 10 qm1
q2 90 3 11 qm2
*
c1 80 91 750e-12
rxcl 91 90 50
cxc1 91 90 400e-12
c2 1 98 30.000E-12
rxcl 98 8 1k
cxc2 98 8 10.000E-12
*
cin 2 3 15e-12
rin 2 3 2e4
ddm1 2 104 dm2
ddm3 104 3 dm2
ddm2 3 105 dm2
ddm4 105 2 dm2
rel 10 12 -4.4157E+01
re2 11 12 -4.4157E+01
iee 12 4 4.5006E-04
re 12 0 4.4439E+05
ce 12 0 1.5789E-12
gcm 0 8 12 0 7.0854E-09
ga 8 0 80 90 1.4137E-02
r2 8 0 1.0000E+05
gb 1 0 8 0 2.6731E+02
ro2 1 0 7.9000E+01
*
rs 1 6 1
ec1 18 0 1 6 2.7910e+01
gcl 0 8 20 0 1
rc1 20 0 1e3
d1 18 20 dm1
d2 20 18 dm1
*
d3a 131 70 dm3
d3b 13 131 dm3
gpl 0 8 70 7 1
vc 13 6 3.6394
rpla 7 70 1e4
rplb 7 131 1e5
d4a 60 141 dm3
d4b 141 14 dm3
gnl 0 8 60 4 1
ve 6 14 3.6394
rnla 60 4 1e4
rnlb 141 4 1e5
*
ip 7 4 7.450E-03
dsub 4 7 dm2
* models
.model qm1 npn (is=8.0000e-16 bf=3.4615e+03)
.model qm2 npn (is=8.0155e-16 bf=6.4286e+03)
.model dm1 d (is=1.000e-19)
.model dm2 d (is=8.000E-16)
.model dm3 d (is=1.000e-20)
.ends LT1115
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* - - - - - * fini LT1115 * - - - - - *

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