

NET LIST

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.SUBCKT MT3S07T 1 2 3
Re1      3 18      2.014E-02      ohm      + AREA = 1
Re2      9 19      2.014E-02      ohm      .MODEL NPN NPN
Le1      6 18      2.260E-10      H        + IS = 7.260E-16 A
Le2      6 19      2.260E-10      H        + BF = 1.900E+02
Ceg1     6 0        1.800E-13      F        + NF = 1.000E+00
Ceg2     9 0        1.346E-14      F        + VAF = 3.740E+01 V
Rb1      2 15      2.014E-02      ohm      + IKF = 1.000E+00 A
Rb2      8 16      2.014E-02      ohm      + ISE = 8.890E-14 A
Lb1      5 15      2.260E-10      H        + NE = 2.460E+00
Lb2      5 16      2.260E-10      H        + BR = 7.920E+01
Cbg1     5 0        1.800E-13      F        + NR = 9.970E-01
Cbg2     8 0        1.346E-14      F        + VAR = 1.780E+00 V
Rc1      1 13      2.014E-02      ohm      + IKR = 1.500E-02 A
Rc2      7 14      2.014E-02      ohm      + ISC = 1.090E-16 A
Lc1      4 13      1.808E-10      H        + NC = 1.070E+00
Lc2      4 14      1.808E-10      H        + RB = 7.300E+00 ohm
Ccg1     4 0        1.800E-13      F        + IRB = 1.000E-09 A
Ccg2     7 0        3.053E-14      F        + RBM = 7.300E+00 ohm
Cbe1     5 6        4.200E-15      F        + RE = 6.300E-01 ohm
Cbc1     7 8        1.659E-13      F        + RC = 4.900E+00 ohm
Cce1     7 9        1.659E-13      F        + XTB = 0.000E+00
Cbe2     8 9        2.000E-13      F        + EG = 1.110E+00 eV
Le3      9 20      2.470E-10      H        + XTI = 3.000E+00
Re3      12 20     2.000E-02      ohm      + CJE = 6.430E-13 F
Lb3      8 17      2.390E-10      H        + VJE = 9.500E-01 V
Rb3      11 17     2.000E-02      ohm      + MJE = 6.540E-01
Cbe3     11 12     1.100E-14      F        + TF = 7.010E-12 s
Cce2     7 12      1.530E-13      F        + XTF = 7.000E+00
Cbc2     7 11      3.000E-14      F        + VTF = 2.000E+00 V
          + ITF = 3.500E-01 A
          + PTF = 2.770E+01 deg
          + CJC = 2.970E-13 F
          + VJC = 6.580E-01 V
          + MJC = 3.600E-01
          + XCJC = 1.000E+00
          + TR = 1.000E-09 s
          + FC = 7.500E-01
.ENDS

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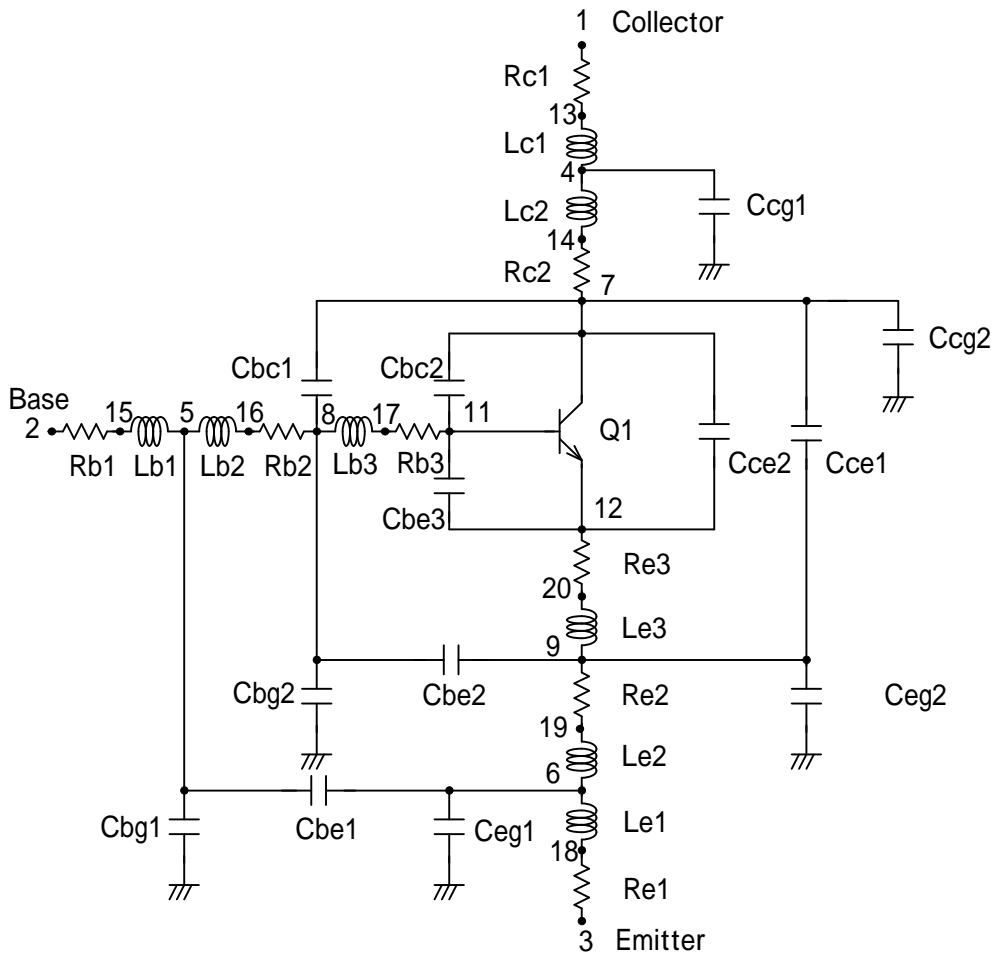


Fig1.Equivalent Circuit

Note1:

This data is valid for up to 6GHz.

Note2:

This data include the reference pads which we note in the databook.

The reference plane is defined as the figure below.

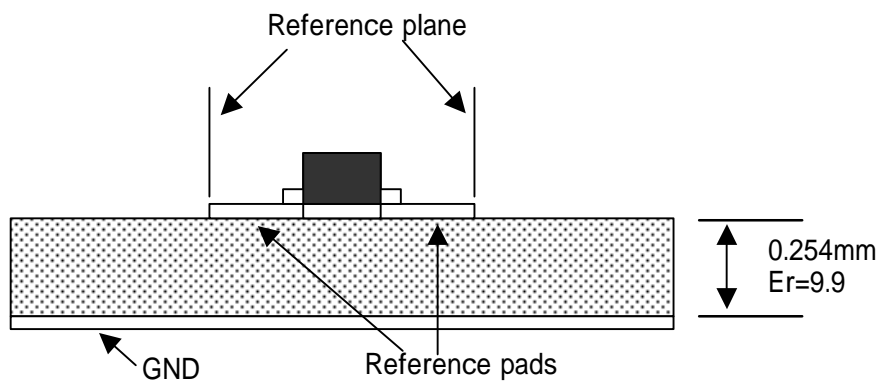


Fig2.Reference plane

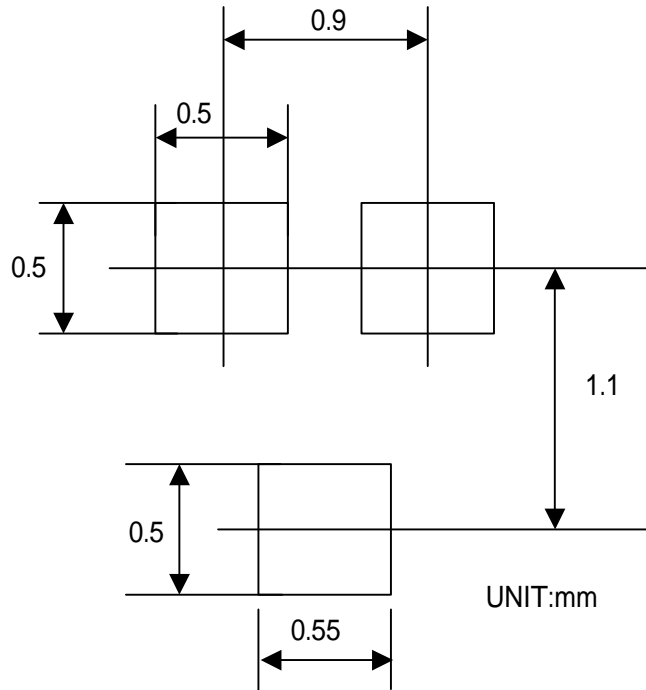


Fig3.Reference pads(TESM)

NOTE3:

Parasitic capacitances are also modeled in this data.

In general some capacitances exist between the pads and the GND or the frame and the GND. Cbg1,Cbg2,Ccg1,Ccg2,Ceg1 and Ceg2 mean these parasitic capacitances.

NOTE4:

The measurements shown in this document are given only as sample characteristics.

Moreover, these sample parameters are not guaranteed for when the device is used in the mass production of equipment, since the high-frequency (AC) characteristics of these devices will be affected by the external components which the customer uses, by the design of the circuits and by various other conditions. It is the responsibility of the customer to check the characteristics of a design. Toshiba assumes no responsibility for the integrity of customer circuit designs or applications.