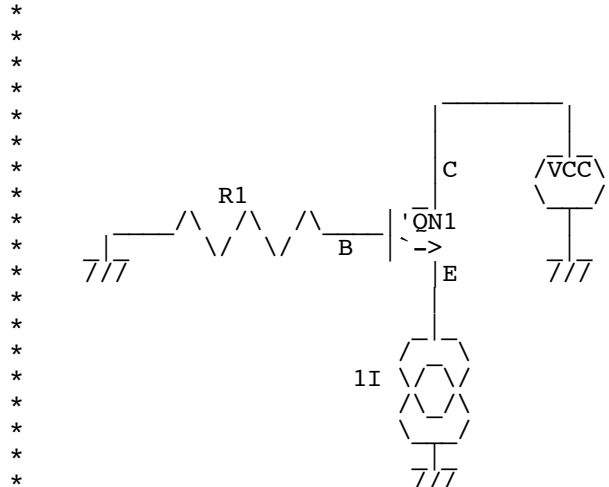


NPN_Ftau_15uu_IKF



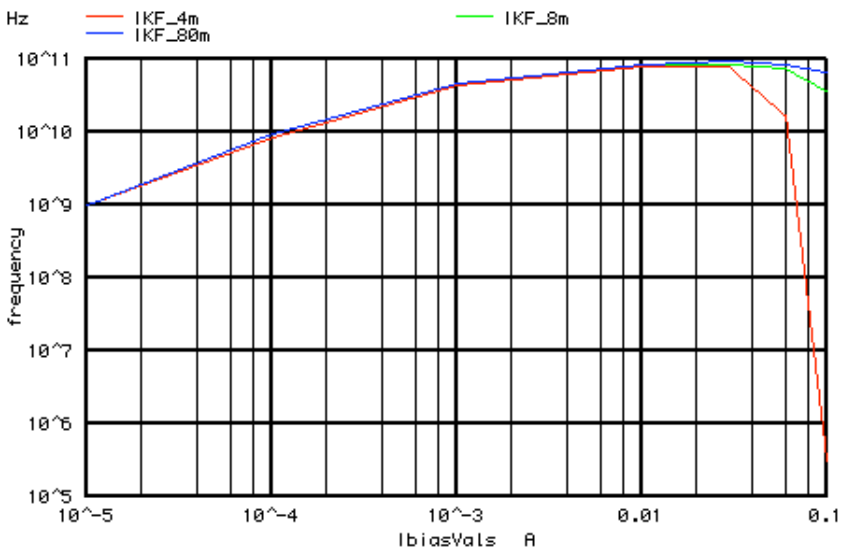
```

.OPTIONS          GMIN=1e-15  METHOD=gear    ABSTOL=1e-15  TEMP=27  srcsteps = 1  gminsteps = 1
VCC      C          0          DC      5V
QN1      C          B          E          NPNV
R1       0          B          1
I1       E          0          DC      100u    AC      .01u

.control
echo                "15um^2 Ftau vs IE and IKF"
setplot            new
set NameList      = ( IKF_4m IKF_8m IKF_80m )
compose IkfVals   values 4m 8m 20m
compose IbiasVals values 10u 100u 1m 10m 30m 60m 100m
settype current   IbiasVals
let NoOfIkf      = length(IkfVals)
let NoOfIbias    = length(IbiasVals)
begin
unset            interrupt
* =====Loop_CJE=====
let j =          1
while            ( j <= NoOfIkf )
let ikf =        IkfVals[j-1]
altermod        npnv ikf = $&ikf
echo            "=>Ibias = Ftau@IKF=$&ikf"
set thisName =  $NameList[$&j]
let $thisName =  0*vector(NoOfIbias)
* =====Loop_Ibias=====
let k =          1
while            ( k <= NoOfIbias )
let Ibias =      IbiasVals[k-1]
alter I1 dc =    $&Ibias
alter I1 ac =    .01u
ac              dec 30 .0001GHz 100GHz
* =====Find_Ftau===== Use
let g =          (-db(b) - 160)
let f =          3.16*mag(frequency[ sortorder( abs(g-10.0) )][0] )
echo            "$&unknown.Ibias $&f"
let             unknown.{ $thisName}[unknown.k-1] = f
destroy
if              (?interrupt)
goto            bail
endif
let k =          k + 1
endwhile
let j =          j + 1
endwhile
setscale        IbiasVals
plot            $NameList loglog title "15um^2 Ftau vs IE and IKF"
label          bail
echo            "Done."
end
.endc

```


Graph 89 - unknown309: 15um^2 Ftau vs IE and IKF



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