

Gain and resistance values specified in module file.

keeWBFK4:
GK501-4 = .150E-2
RK501-2 = .888E+4

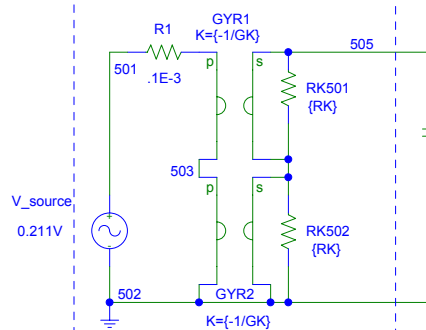
PARAMETERS:

GK .150E-2
RK .888E+4



Knowles WBFK Analog Standard Response

Module File: keeWBFK4



Generic coil model consists of two gyrators. Input nodes are 501 (+) and 502 (-). Node 503 is used only for models with bi-filar coils (i.e., center tap).

GYRATOR MODEL
Gyrator between node pairs (1,2) and (3,4) having a gyrator constant K

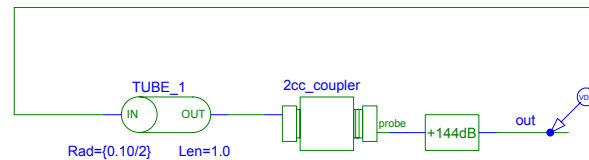
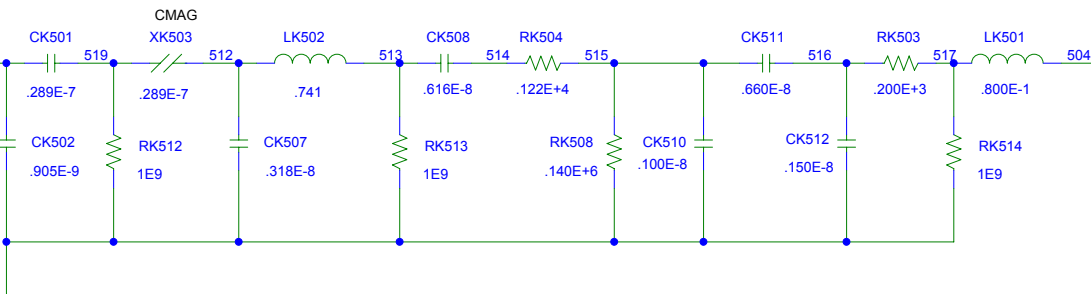
```
.SUBCKT GYR-X 1 2 3 4 PARAMS:K=1
R1 1 2 9E+12
R2 3 4 9E+12
R3 2 3 9E+12
G1 1 2 VALUE = {V(3,4)/K}
G2 3 4 VALUE = {-V(1,2)/K}
.ENDS
```

*CMAG models a capacitive impedance in series with a resistor to create a 45 degree phase angle at all frequencies. The net impedance varies as 1 over the square root of frequency.

*CMAG is the capacitor's value at 1 kHz.
*Also called VRMAG, VCMAG in older models

```
.SUBCKT CMAG-X 1 2 PARAMS:CMAG = 1
R1 1 2 1E+12
G1 1 2 FREQ {(,707*V(1,2)*(CMAG*6282)) =
+ (20,-17,45)
+ (20000,13,45)
.ENDS
```

Module File: kerWBFK1



Add 144dB to convert output to dB SPL

Tubing and coupler specified in Knowles Sheet 2.1
[10mm x 1.0mm ID]

Knowles Electronics LLC
1151 Maplewood Drive
Itasca, IL 60143
(630) 250-5100

Page Size: A

Revision: 9

April 2007

Page 1 of 1