

Gain and resistance values specified in module file.
GK501-504 = GK
RK501-502 = FK

PARAMETERS:
GK 1.58E-3
RK .590E+4



Knowles FC Analog Higher Output Response

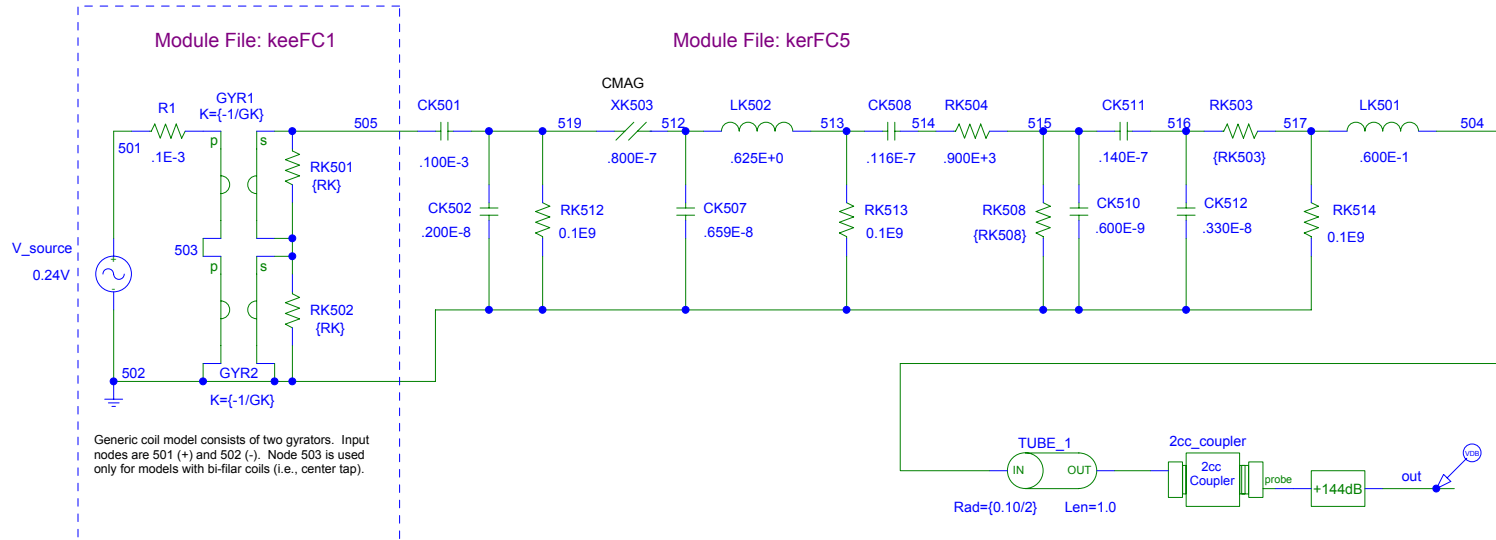
FC-6170, 6171, 6184

PARAMETERS:
RK503 .200E+3
RK508 .050E+6

VARY RESISTORS FOR DAMPING:
Units: CGS ohms

Undamped:
RK503 = .200E+3
RK508 = .120E+6

Type 3:
RK503 = .200E+3
RK508 = .050E+6



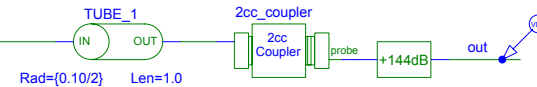
GYRATOR MODEL
Gyrator between node pairs (1,2) and (3,4) having a gyrator constant K

```
.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
```



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

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