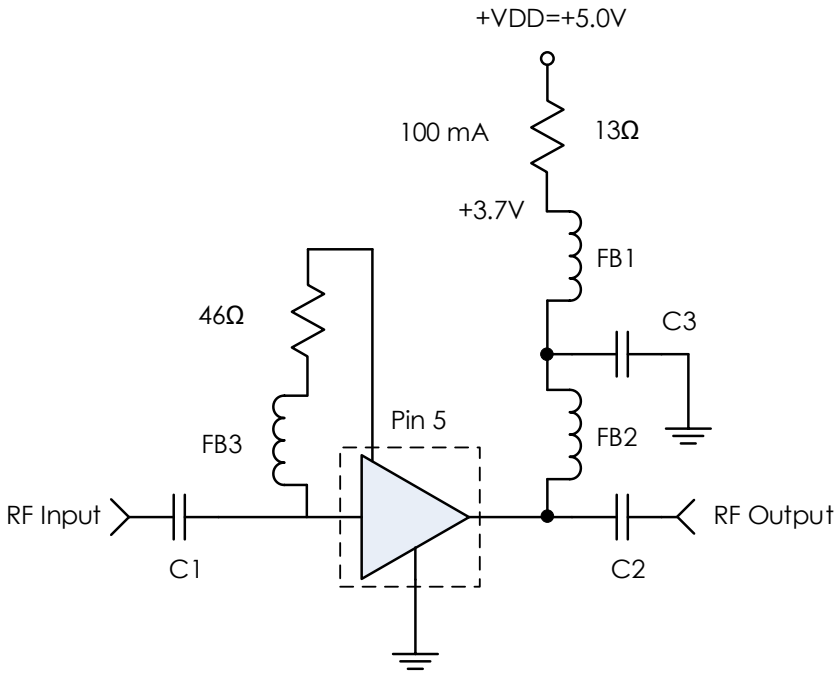
RECOMMENDED APPLICATION



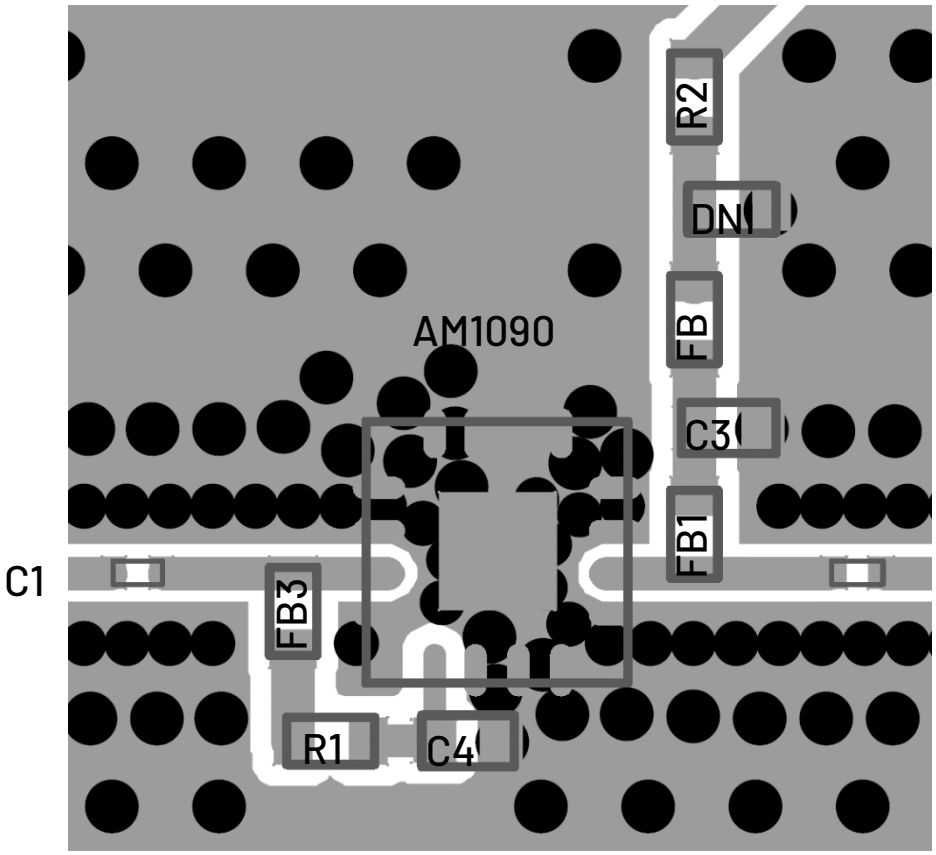
RECOMMENDED COMPONENT LIST (OR EQUIVALENT)

Part	Value	Part Number	Manufacturer
C1, C2	0.1 uF	0201BB104KW160	Passives Plus
C3	0.1 uF	GRM155R71C104KA88	Murata
FB1 – FB3	-	MMZ1005A222E	TDK
R1	46.4Ω	RC0402FR-0746R4L	Yageo
R2	13Ω	RC0402FR-0713RL	Yageo

Notes:

1. C1 and C2 should be low-loss broadband capacitors for optimum performance.
2. Recommended voltage of +3.7V +/- 0.1V at node shown, the DC input of the RF choke.
    a. If alternative ferrite beads or bias tee is to be chosen, try to maintain a similar DCR to the recommended components above
    b. DC current draw in this configuration is 100 mA +/- 5%
    c. If a +5.0V source is to be used, a 13Ω dropping resistor is recommended to achieve the proper voltage at the DC input of the RF choke.
3. Resistors with tolerance of 1% are recommended though 2% resistors may be used as well. Tolerance should not exceed 2%.
4. Components recommended above are 0402 components though 0201 components may also be used.

RECOMMENDED LAYOUT



Notes:

1. C4 = C3 = GRM155R71C104KA88. C4 recommended for better noise performance.
2. Recommended input trace is grounded coplanar waveguide, 50 ohms.
3. IC and RF input / output should be via fenced.
4. Vias should be placed under IC and GND pads.

REVISION HISTORY

Date	Revision	Notes
February 8, 2021	1	Initial release.
August 13, 2024	2	Changed to Mercury branding. No content changes.

For more information, contact: MMICsupport@mrcy.com