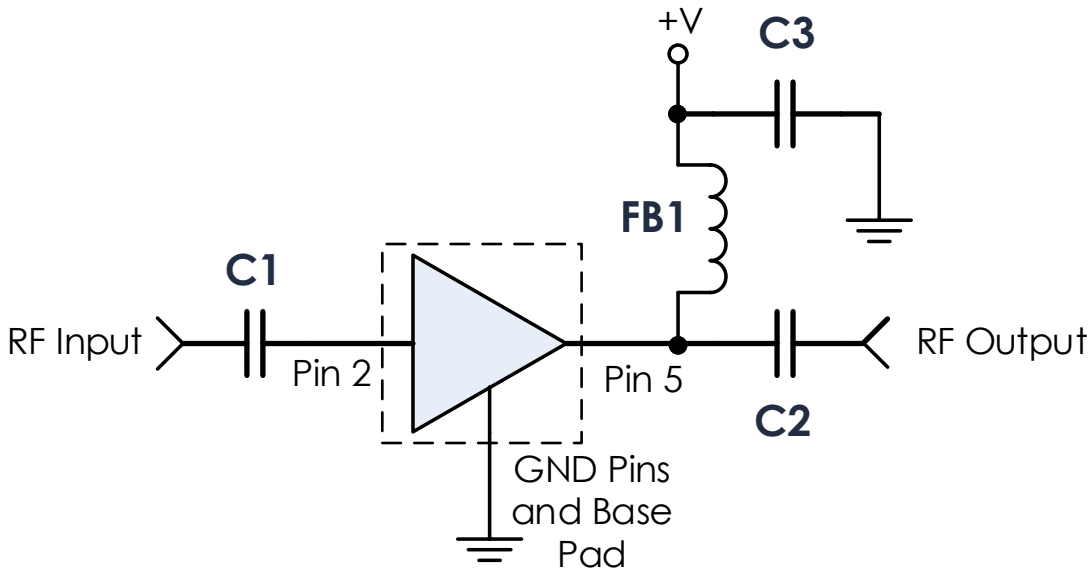
1.3mm x 2mm Amplifier Application Note

VDD on RF Out

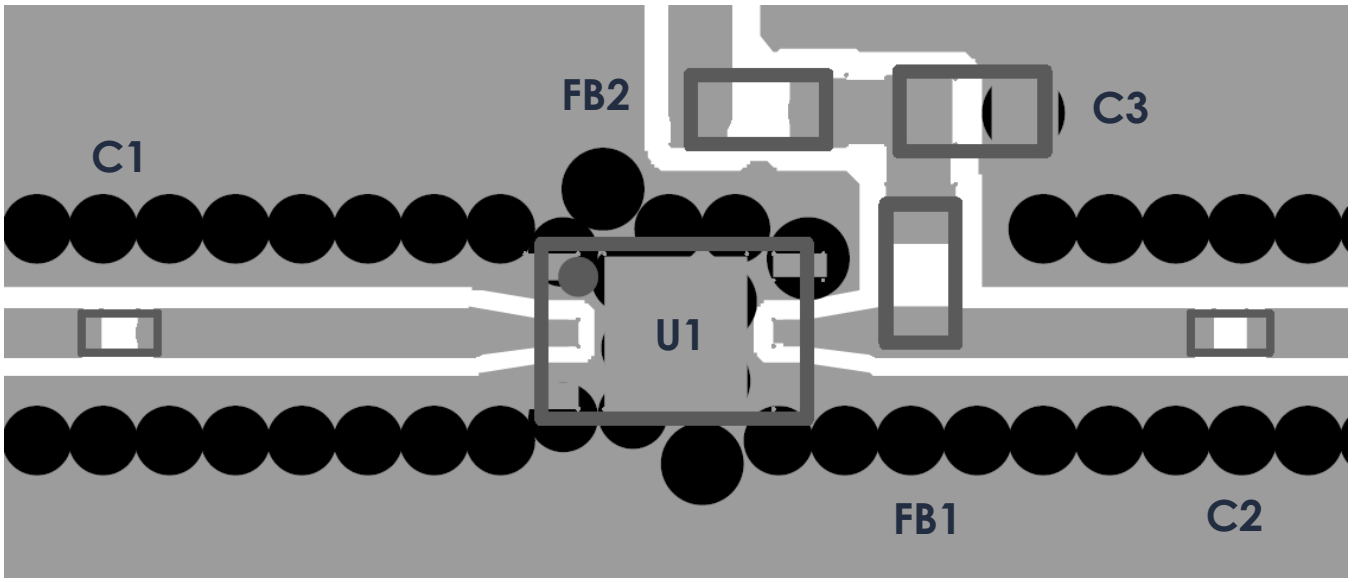
Typical Application



Recommended Component List (or equivalent):

Part	Value	Part Number	Manufacturer
C1, C2	0.1 uF	0402BB104KW160	Passives Plus
C3	0.1 uF	GRM155R71C104KA88	Murata
FB1	-	MMZ1005A222E	TDK

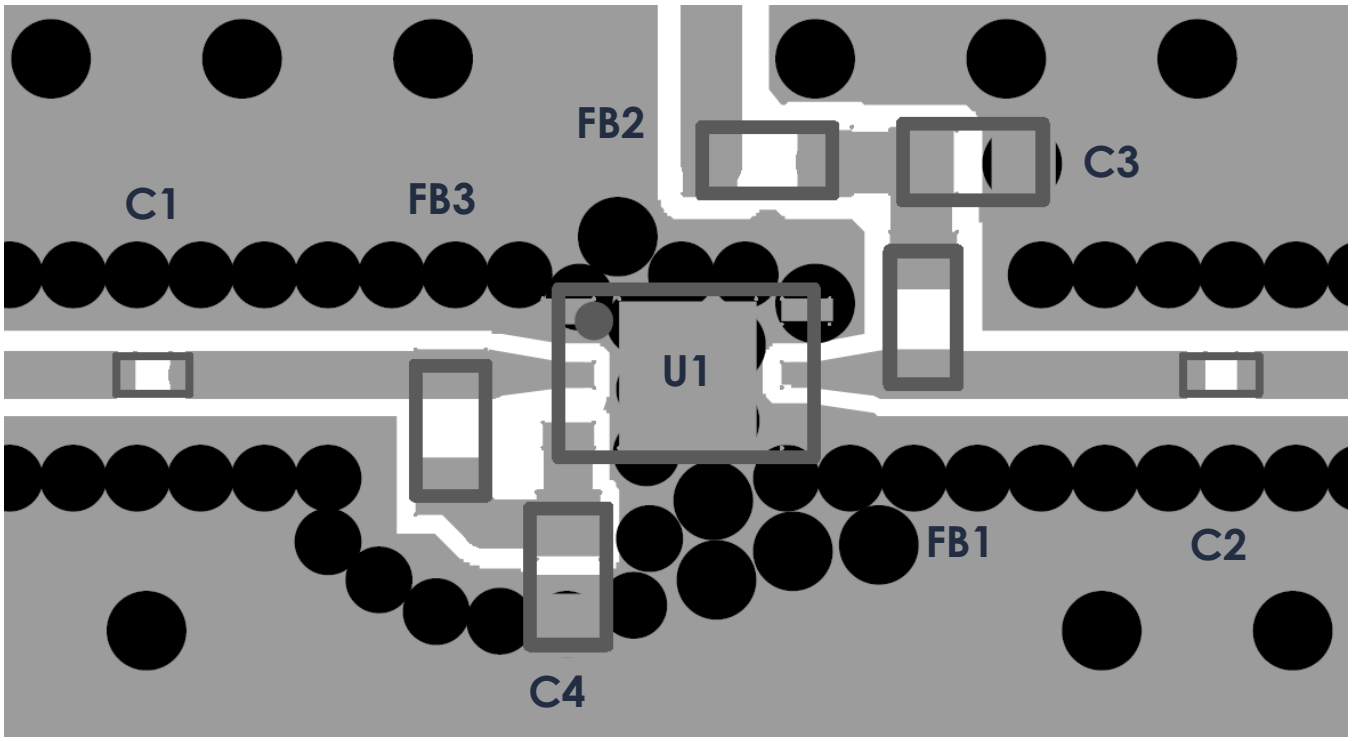
Recommended Layout



Notes:

1. FB2 = FB1 = MMZ1005A222E for symmetry.
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.

Recommended Layout – Atlanta Micro 1.3mm x 2mm Amp Drop In Layout



Notes:

1. FB3 = FB2 = FB1 = MMZ1005A222E for symmetry.
2. C4 = C3 = GRM155R71C104KA88
3. Recommended input trace is grounded coplanar waveguide, 50 ohms.
4. IC and RF input / output should be via fenced.
5. Vias should be placed under IC and GND pads.
6. Adding FB3 and C4 connected to pin 3 of the amplifier allows for maximum compatibility with Atlanta Micro 1.3mm x 2mm amplifiers. Using this footprint lets one swap different amplifiers should more or less gain, linearity, or NF be needed.

Revision History

Date	Revision Number	Notes
June 25, 2020	1	Initial Release