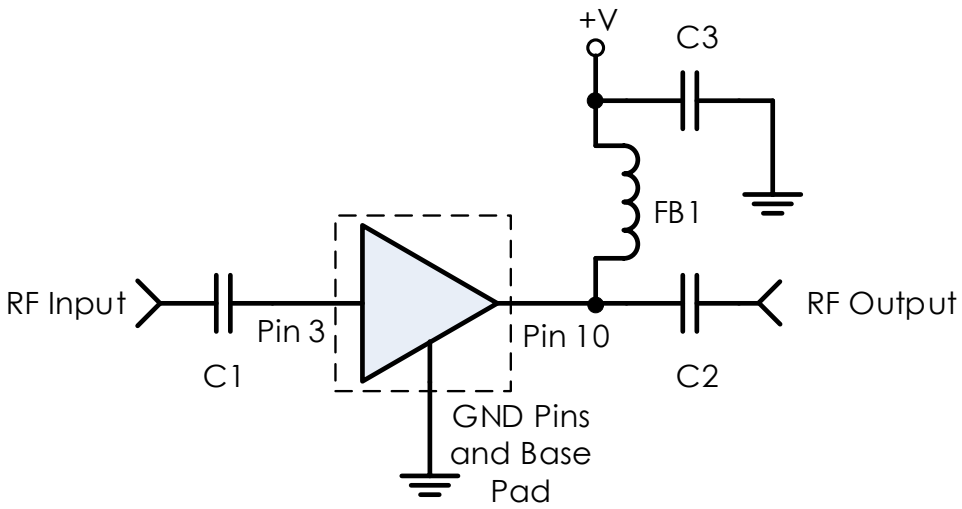
3mm Amplifier Application Note

VDD on RF Out

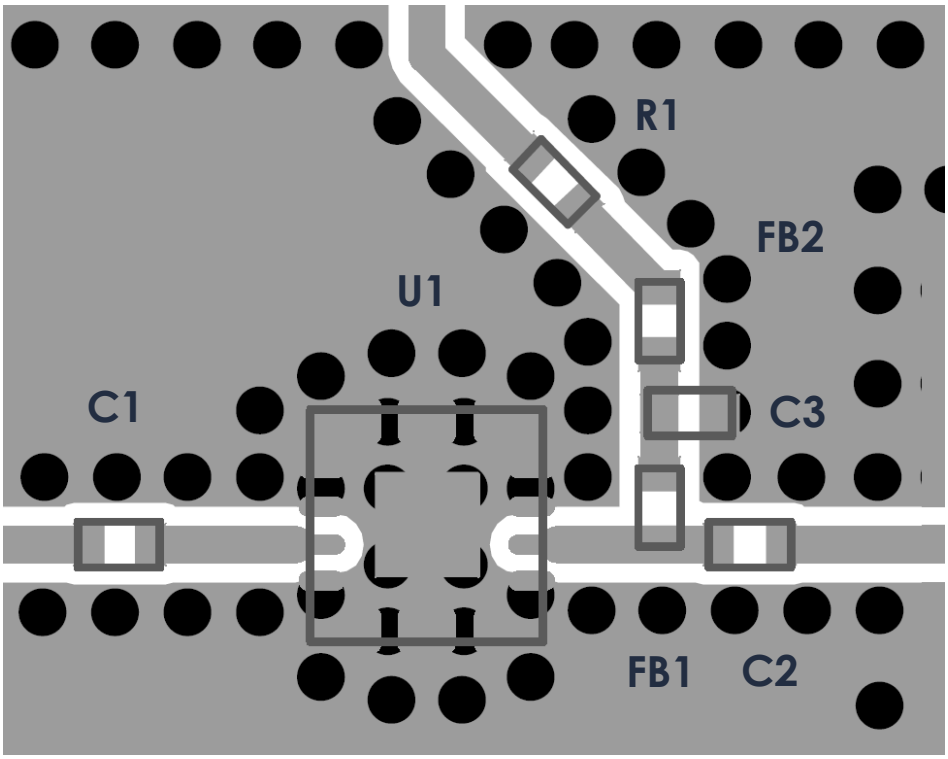
Typical Application



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

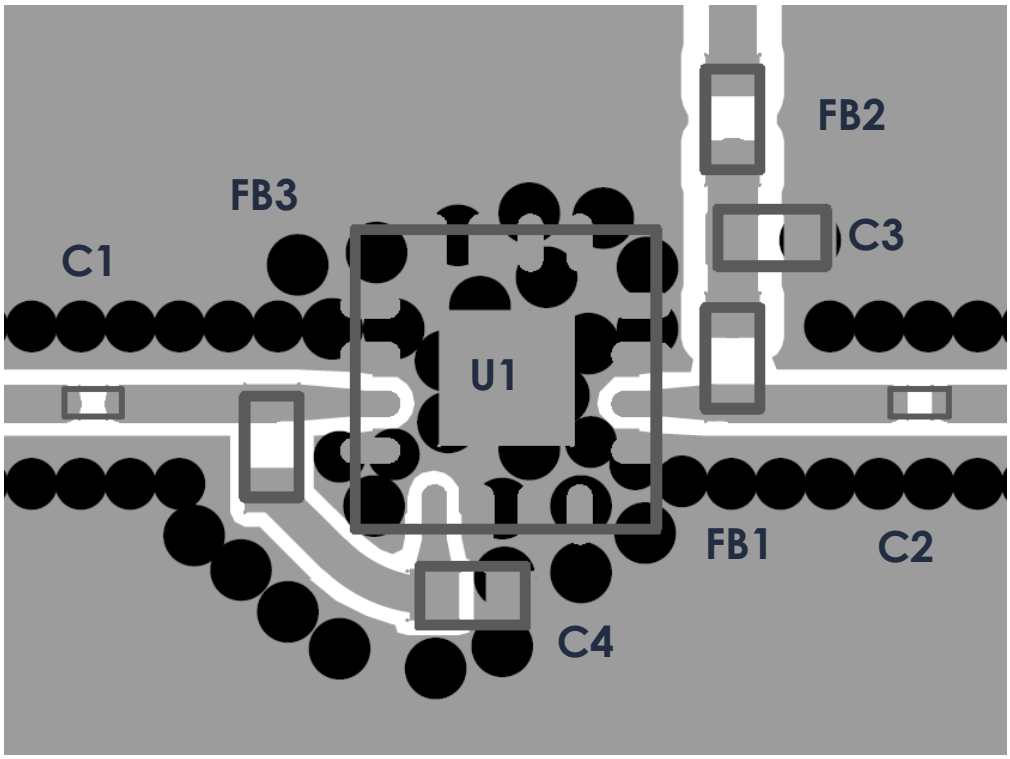
Recommended Layout



Notes:

1. FB2 = FB1 = MMZ1005A222E for symmetry.
2. R1 = 0 ohms.
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.

Recommended Layout – Atlanta Micro 3mm Amp Drop In Layout



Notes:

1. FB3 = FB2 = FB1 = MMZ1005A222E for symmetry.
2. C4 = C3 = GRM155R71C104KA88
3. R1 = 0 ohms. (not shown, keep in same place as previous layout)
4. Recommended input trace is grounded coplanar waveguide, 50 ohms.
5. IC and RF input / output should be via fenced.
6. Vias should be placed under IC and GND pads.
7. Adding FB3 and C4 connected to pin 5 of the amplifier allows for maximum compatibility with Atlanta Micro 3mm 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