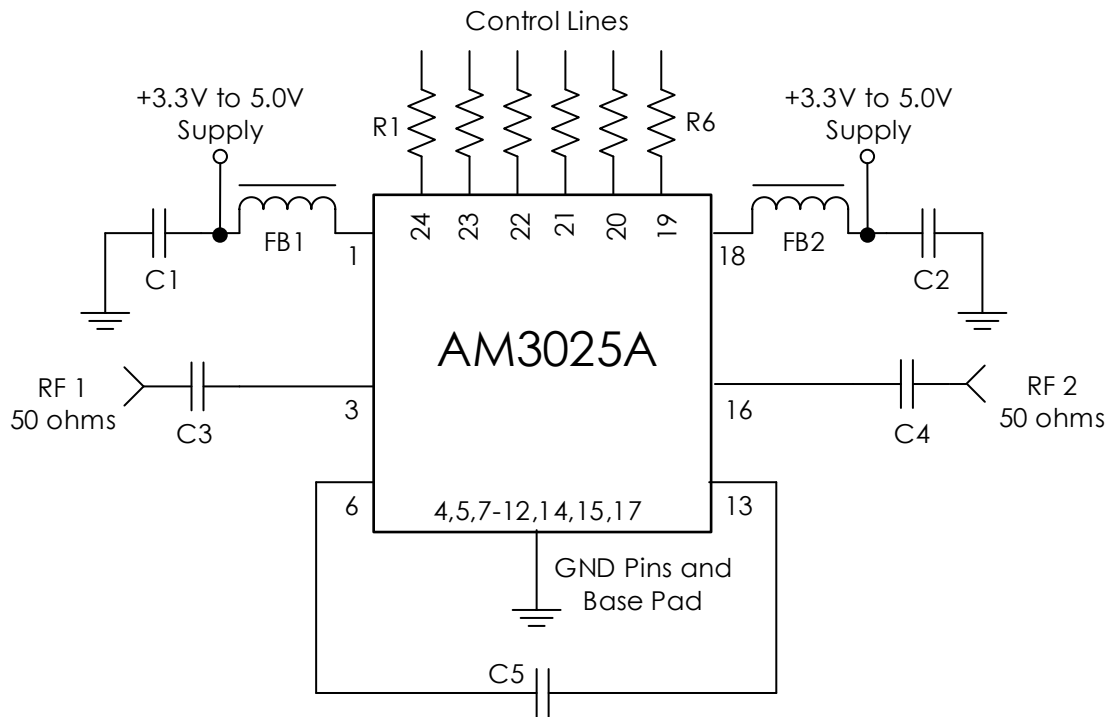


# AM3025A Application Note

## Miniature Transmit / Receive with Sub-Octave Filtering

### Typical Application



### Recommended Component List (or equivalent):

Part	Value	Part Number	Manufacturer
C1, C2	0.1 $\mu$ F	GRM155R71C104KA88	Murata
C3, C4, C5	0.1 $\mu$ F	0402BB104KW160	Passives Plus
FB1, FB2		MMZ1005A222E	TDK
R1 – R6	100 $\Omega$	CRCW0402100RFKED	Vishay

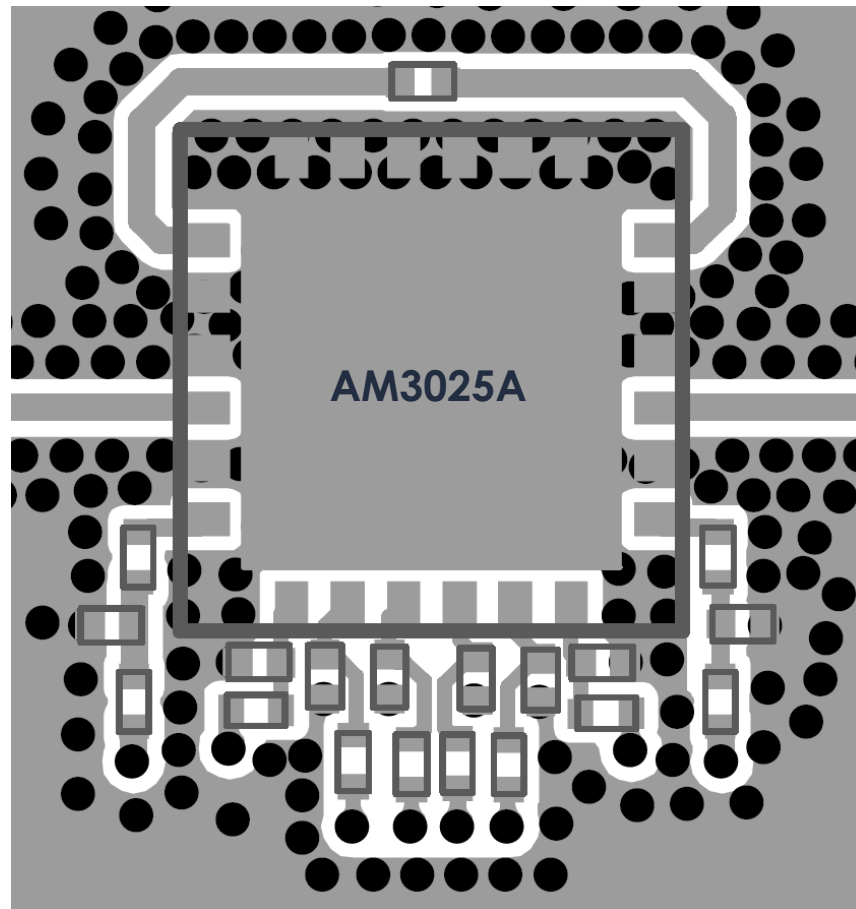
### Notes:

- C3, C4, and C5 should be high performance, low-loss, broadband capacitors for optimum performance.
- RC filtering on the control lines is recommended to prevent digital noise from coupling to the RF path.
  - Select control line RC filter values based on desired logic source decoupling and switching speed.

# AM3025A Application Note

## Miniature Transmit / Receive with Sub-Octave Filtering

### Recommended Layout



#### Notes:

1. Power line filtering is made symmetric here such that it is L – C – L filtering. L – C filtering may be used if space is critical.
2. Recommended input trace is grounded coplanar waveguide, 50 ohms.
3. IC and RF inputs / outputs should be via fenced.
4. Vias should be placed under IC and GND pads (not shown).
5. Vias shown are 10mil hole size with 24mil pad.
6. DC blocks not shown here, though still required.

### Revision History

Date	Revision Number	Notes
April 10, 2020	1	Initial Release