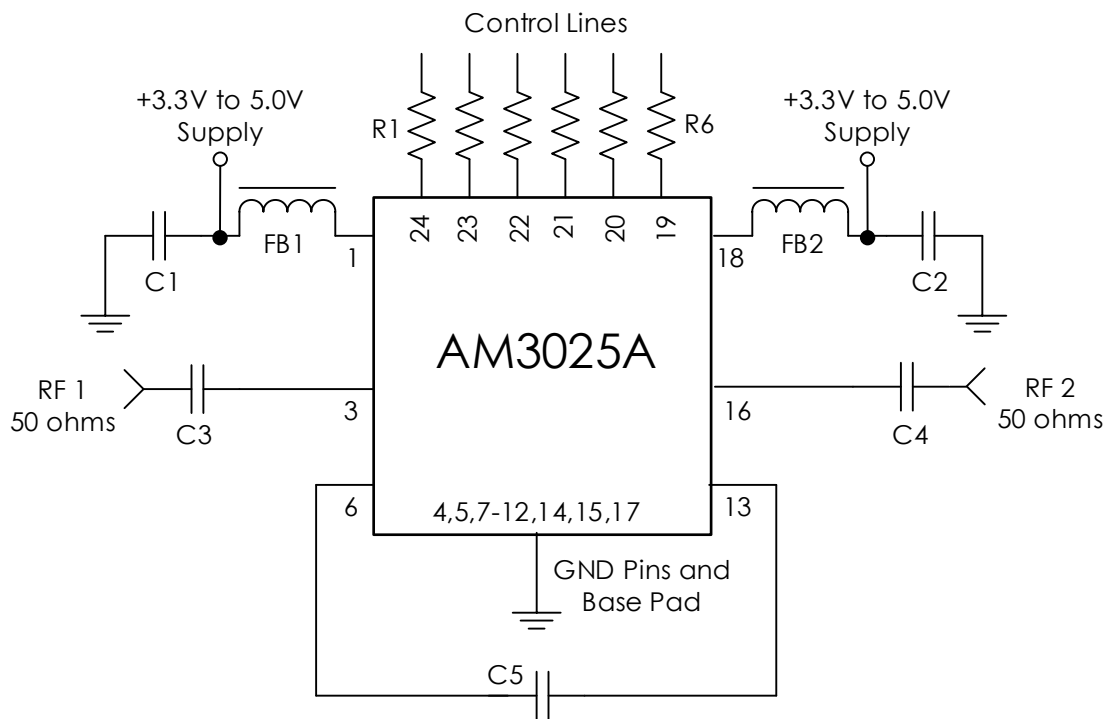


## TYPICAL APPLICATION



## RECOMMENDED COMPONENT LIST (OR EQUIVALENT)

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

## Notes:

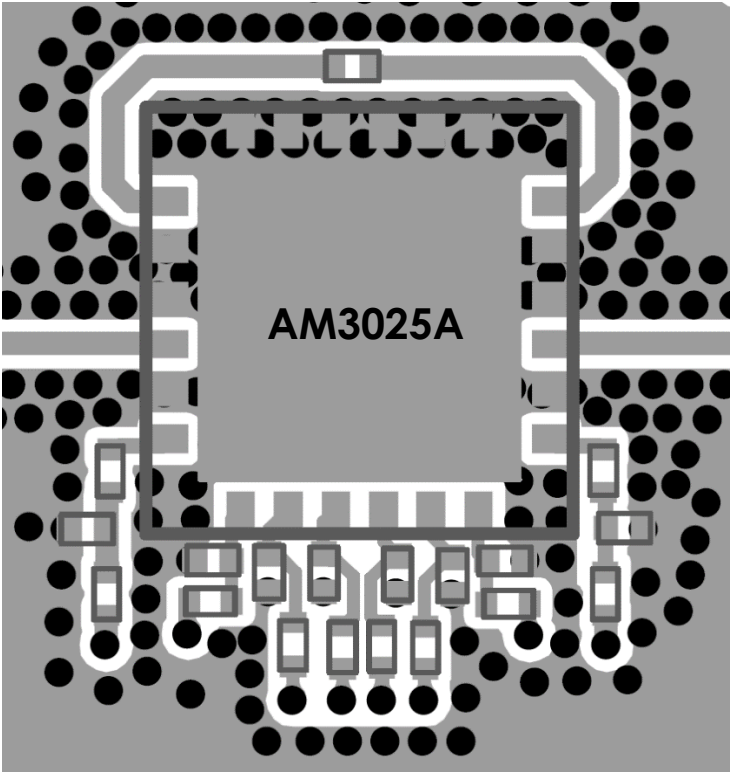
- C3, C4, and C5 should be high performance, low-loss, broadband capacitors for optimum performance.
- RC filtering on the control lines is recommended to prevent digital noise from coupling to the RF path.
  - Select control line RC filter values based on desired logic source decoupling and switching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

APPLICATION NOTE

AM3025A - 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	Notes
April 10, 2020	1	Initial release
July 30, 2024	2	Changed to Mercury branding. No content changes.

For more information, contact: [MMICsupport@mrchy.com](mailto:MMICsupport@mrchy.com)

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