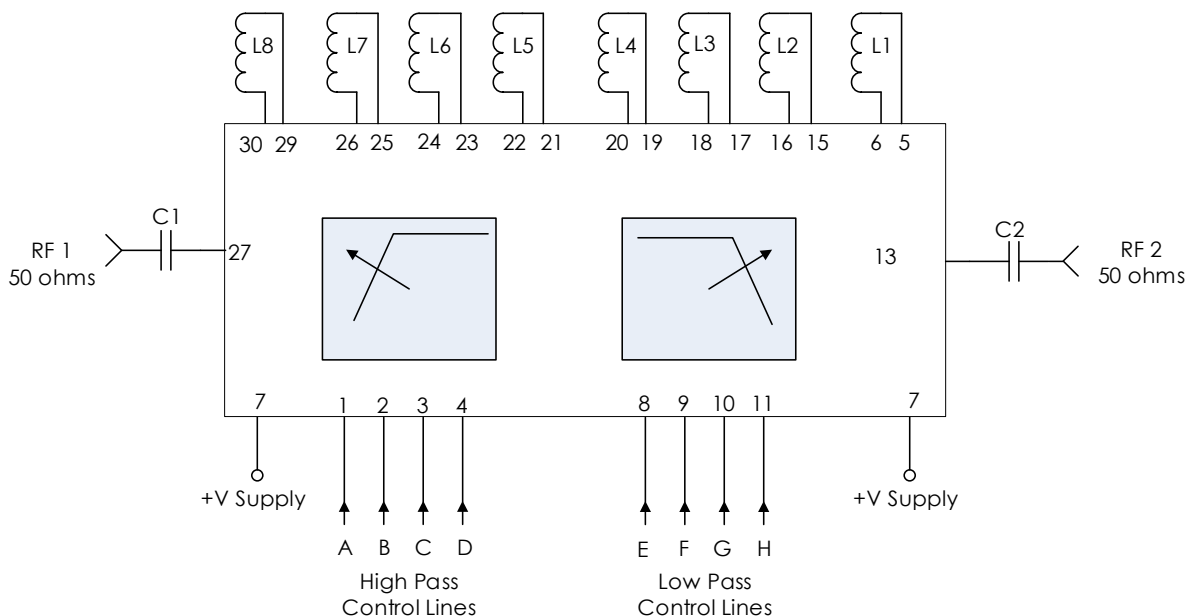


TYPICAL APPLICATION

Digitally Tunable BPF 330 MHz – 1200 MHz



RECOMMENDED COMPONENT LIST (OR EQUIVALENT)

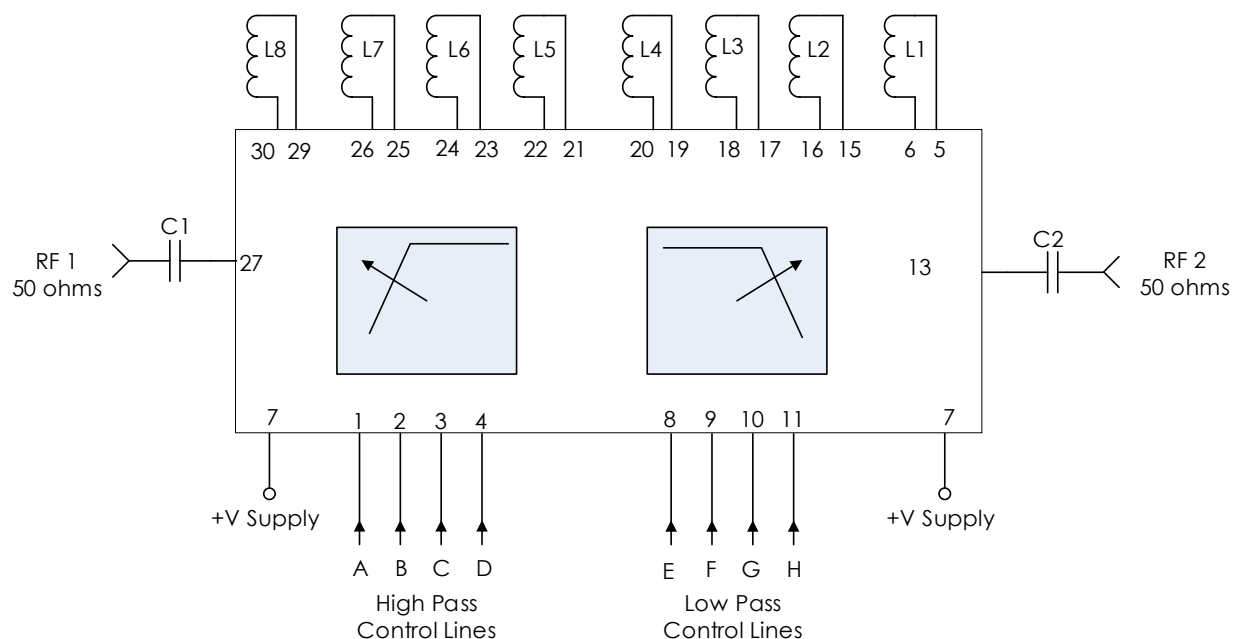
Part	Value	Part Number	Manufacturer
C1, C2	0.1 uF	0402BB104KW160	Passives Plus
L1, L8	13 nH	0402HP-13NXGLW	Coilcraft
L2, L5	6.2 nH	0402HP-6N2XGLW	Coilcraft
L3, L4	6.8 nH	0402HP-6N8XGLW	Coilcraft
L6, L7	9.0 nH	0402HP-9N0XGLW	Coilcraft

Notes:

- DC blocking capacitors should be low-loss, broadband capacitors for optimum performance.
- Routes to off-chip inductors, L1 through L8, should be kept as short as possible.
- VDD and control lines filtered internally providing high frequency isolation to 50 + GHz.
 - See AM35 datasheet for more information.

TYPICAL APPLICATION (CONTINUED)

Digitally Tunable BPF 450 MHz – 1500 MHz



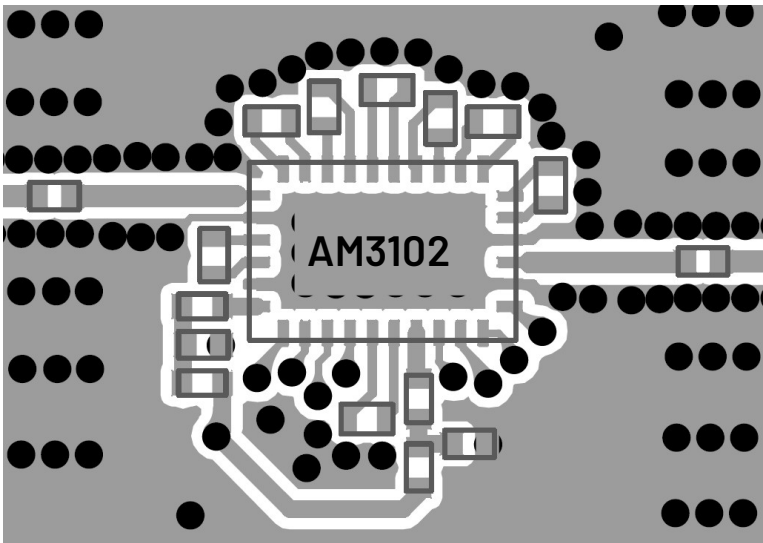
RECOMMENDED COMPONENT LIST (OR EQUIVALENT)

Part	Value	Part Number	Manufacturer
C1, C2	0.1 uF	0402BB104KW160	Passives Plus
L1, L8	9.5 nH	0402HP-9N5XGLW	Coilcraft
L2, L5	2.2 nH	0402HP-2N2XJLW	Coilcraft
L3, L4	2.7 nH	0402HP-2N7XGLW	Coilcraft
L6, L7	5.6 nH	0402HP-5N6XGLW	Coilcraft

Notes:

- DC blocking capacitors should be low-loss, broadband capacitors for optimum performance.
- Routes to off-chip inductors, L1 through L8, should be kept as short as possible.
- VDD and control lines filtered internally providing high frequency isolation to 50 + GHz.
 - See AM35 datasheet for more information.

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. Inductors are to be as close as possible to the IC.

REVISION HISTORY

Date	Revision	Notes
May 21, 2020	1	Initial release
August 14, 2024	2	Changed to Mercury branding. No content changes.

For more information, contact: MMICsupport@mrchy.com

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