sens**L**
sense light

Reference Designs for the SMA and SMTPA Boards

OVERVIEW

This document gives the complete schematics for the SMA and SMTPA products from SensL.

The board schematics are accurate representations of the circuitry of the SensL products. The schematics can be used by the customer for their own readout solutions, but this is at the customer's own risk. Complete Gerber and board specification files for each product are available from SensL upon request.
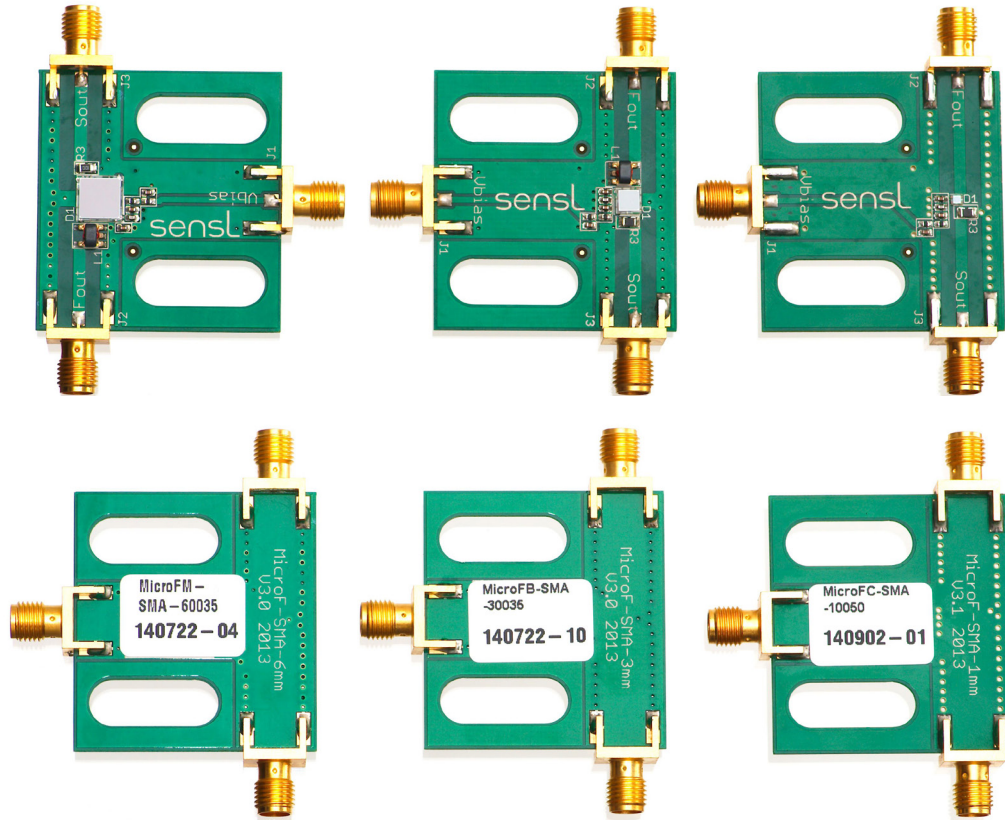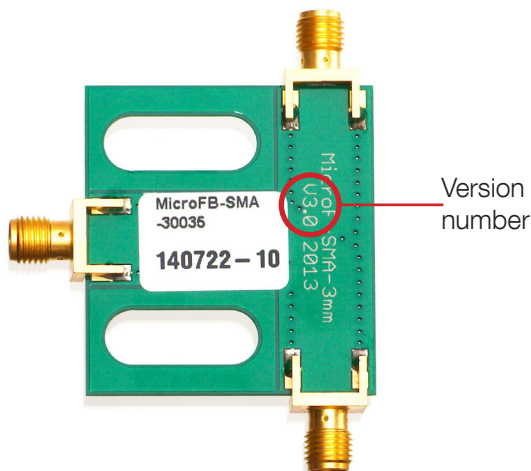
Contents

SMA BOARDS

Figure 1, (Top) top view and (bottom) bottom view of the version 3 SensL SMA boards, from left to right 6mm, 3mm and 1mm.

Identifying SMA Board Version Number

Version number

There are multiple versions of the B-Series and C-Series SMA boards, so it is important that the user consults the correct schematics and CAD. To do this, the version number of a given board can be determined by looking at the rear of the board. The version number is given after the part number and takes the form "V3.0", as in the example on the left.

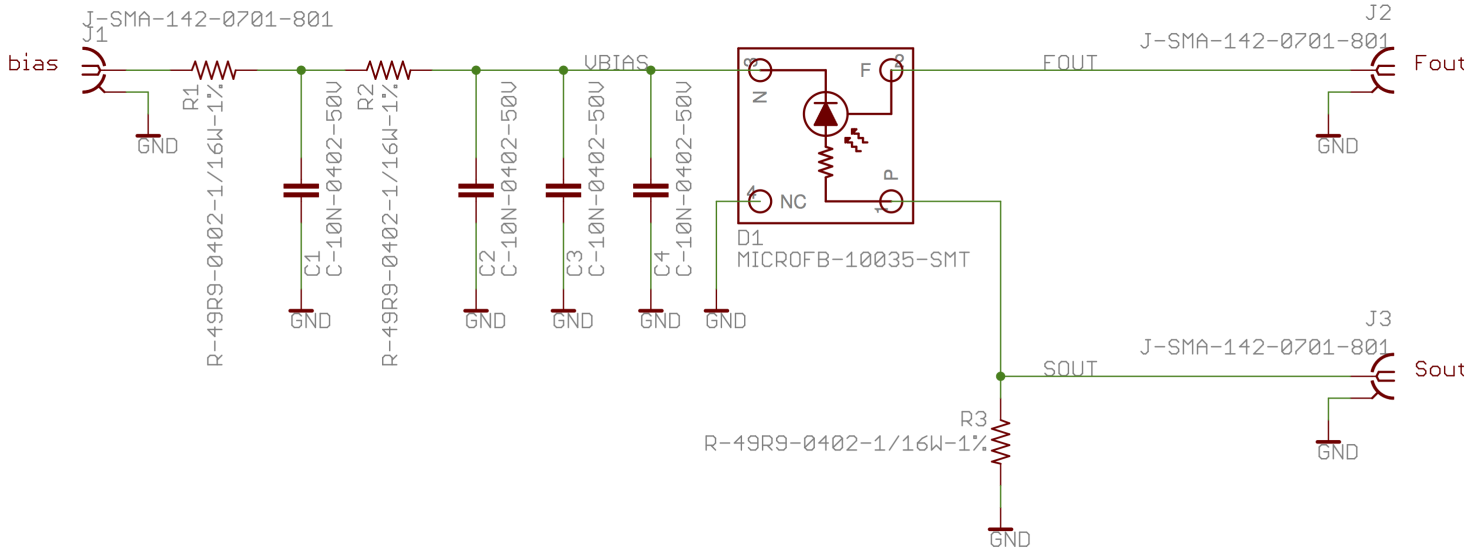## SMA Board Schematics - B- and C-Series - Version 2.0*

Figure 2, Board schematics for the MicroFB-SMA-100XX or MicroFC-SMA-100XX (version 2.0)
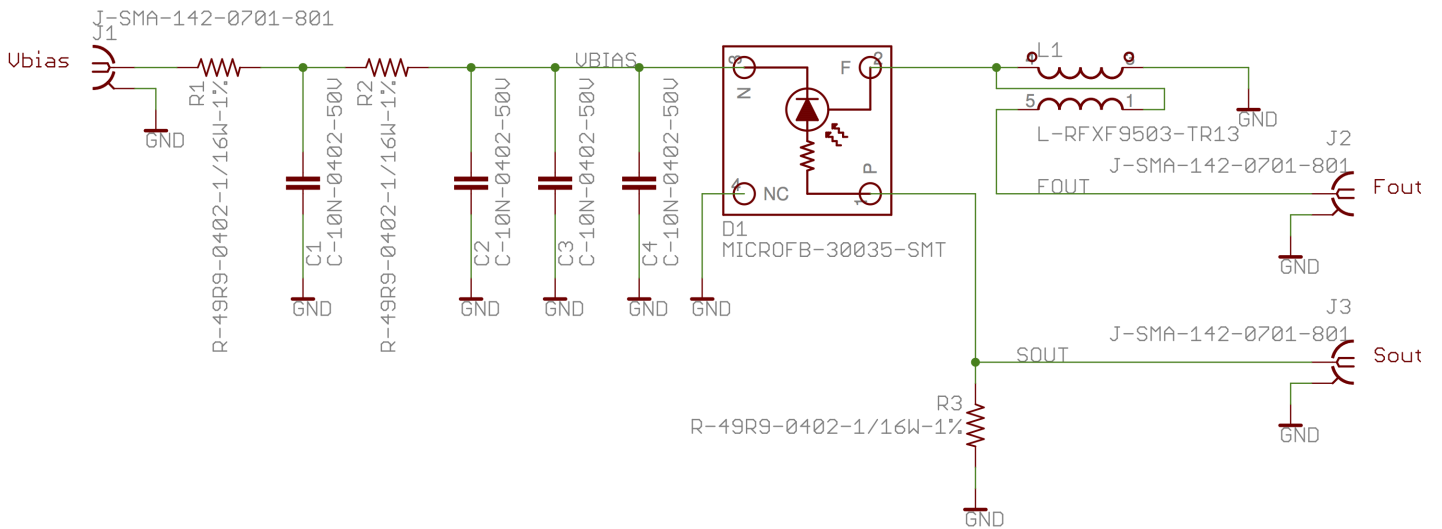

Figure 3, Board schematics for the MicroFB-SMA-300XX or MicroFC-SMA-300XX (version 2.0)

* See page 2 for help in identifying a board's version number.

Figure 4, Board schematics for the MicroFB-SMA-600XX or MicroFC-SMA-600XX (version 2.0)

SMA Board Schematics - B- and C-Series - Version 3.X*

Figure 5, Board schematics for the MicroFB-SMA-100XX or MicroFC-SMA-100XX (version 3.1)

Figure 6, Board schematics for the MicroFB-SMA-300XX or MicroFC-SMA-300XX (version 3.0)

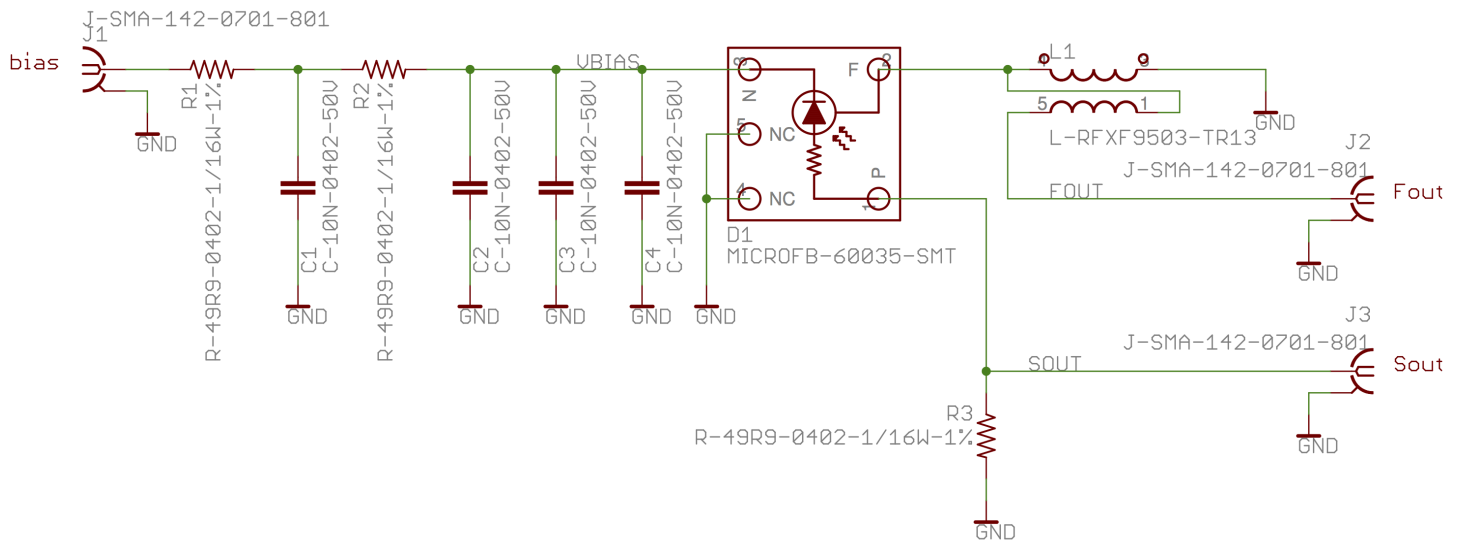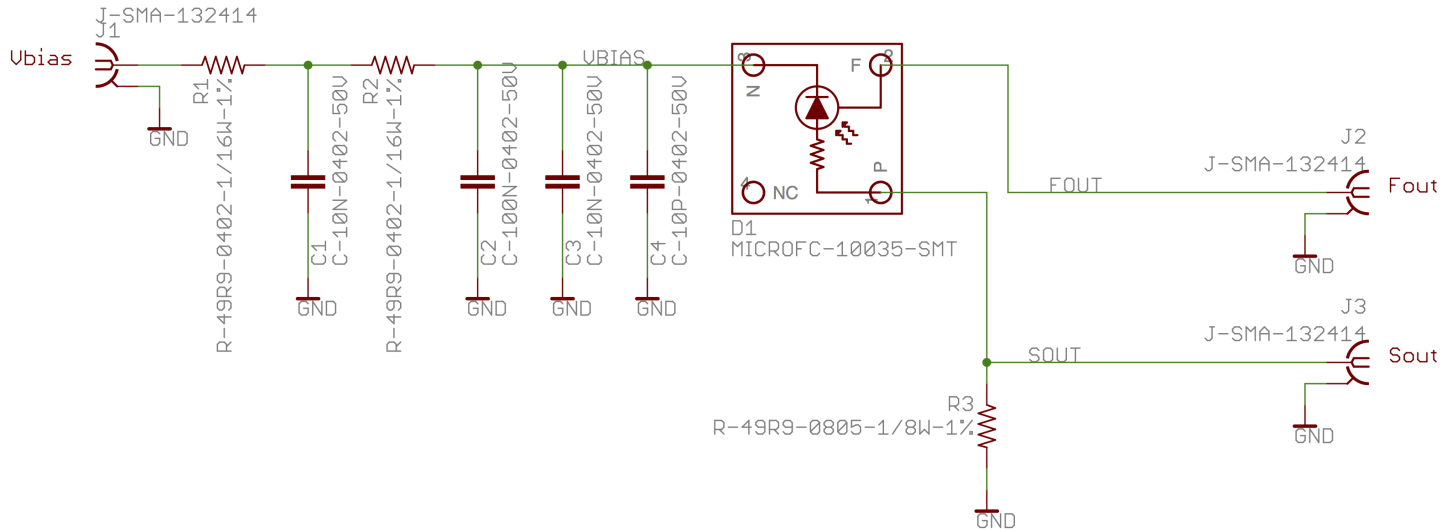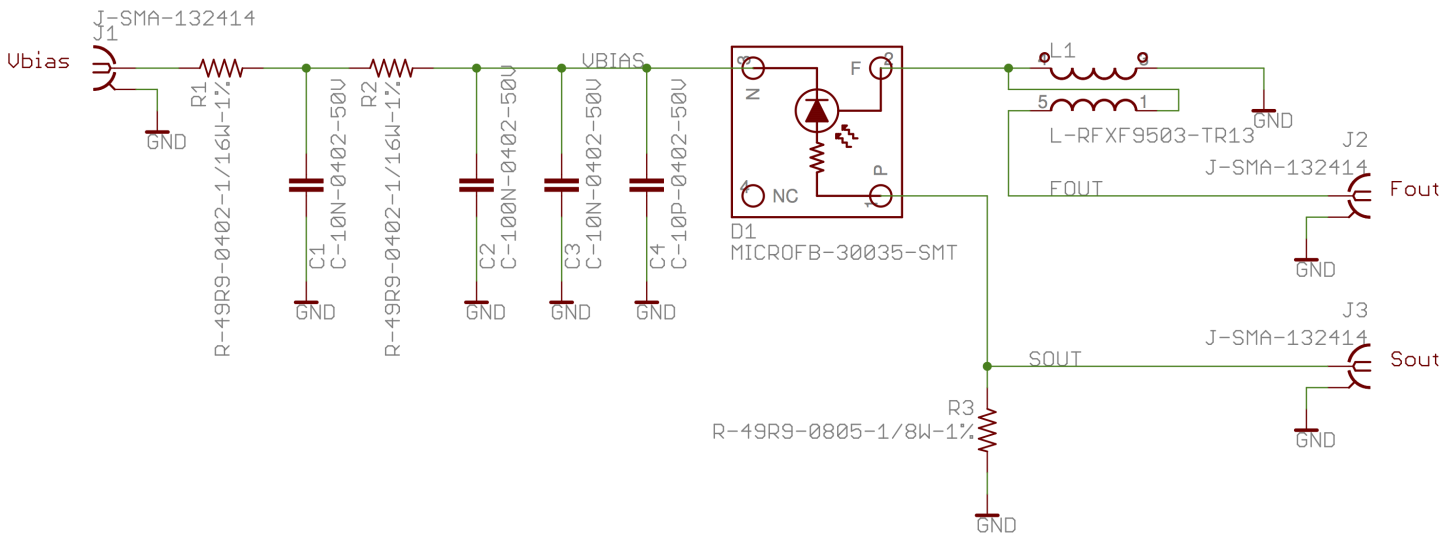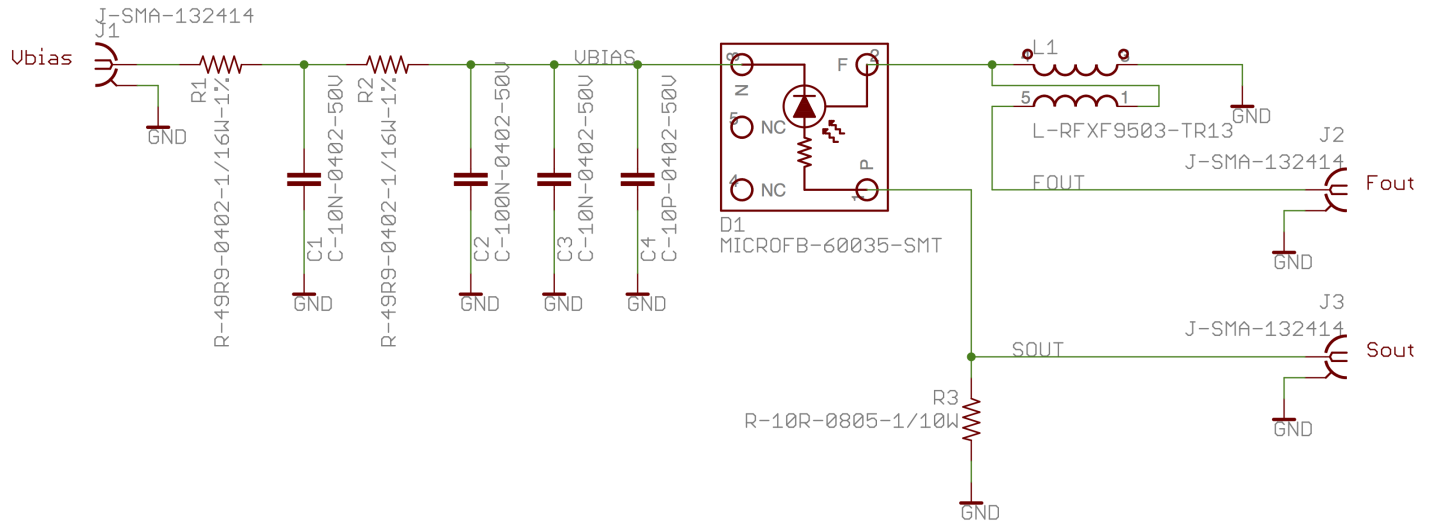* See page 2 for help in identifying a board's version number.

Figure 7, Board schematics for the MicroFB-SMA-600XX or MicroFC-SMA-600XX (version 3.0)

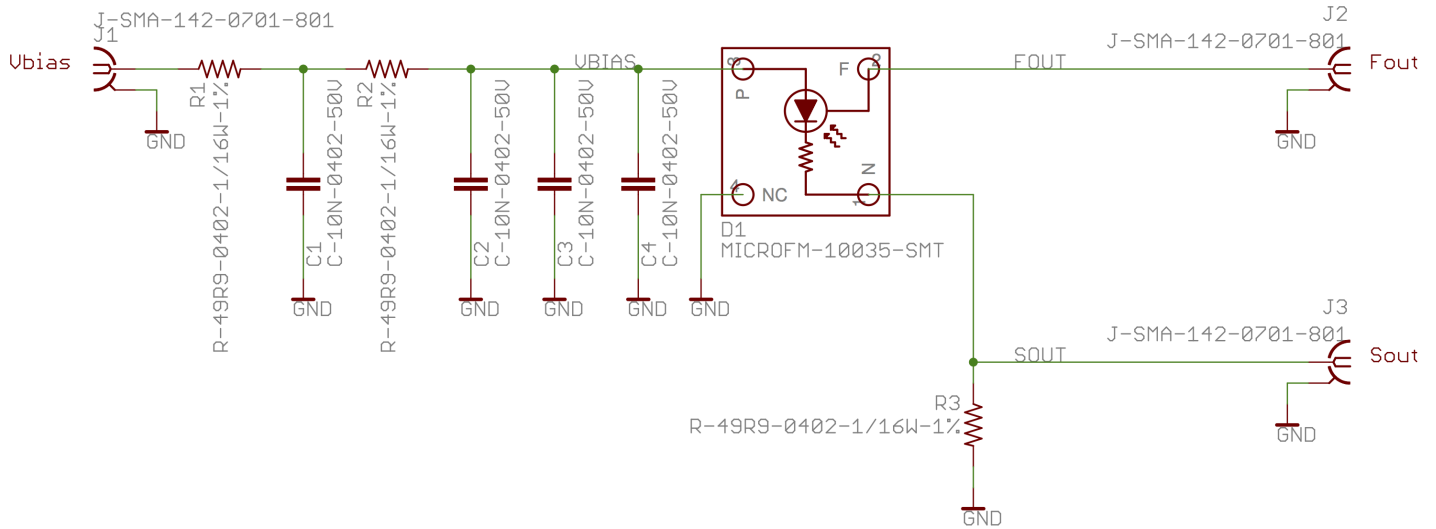## SMA Board Schematics - M-Series

Figure 8, Board schematics for the MicroFM-SMA-100XX (version 2.0)
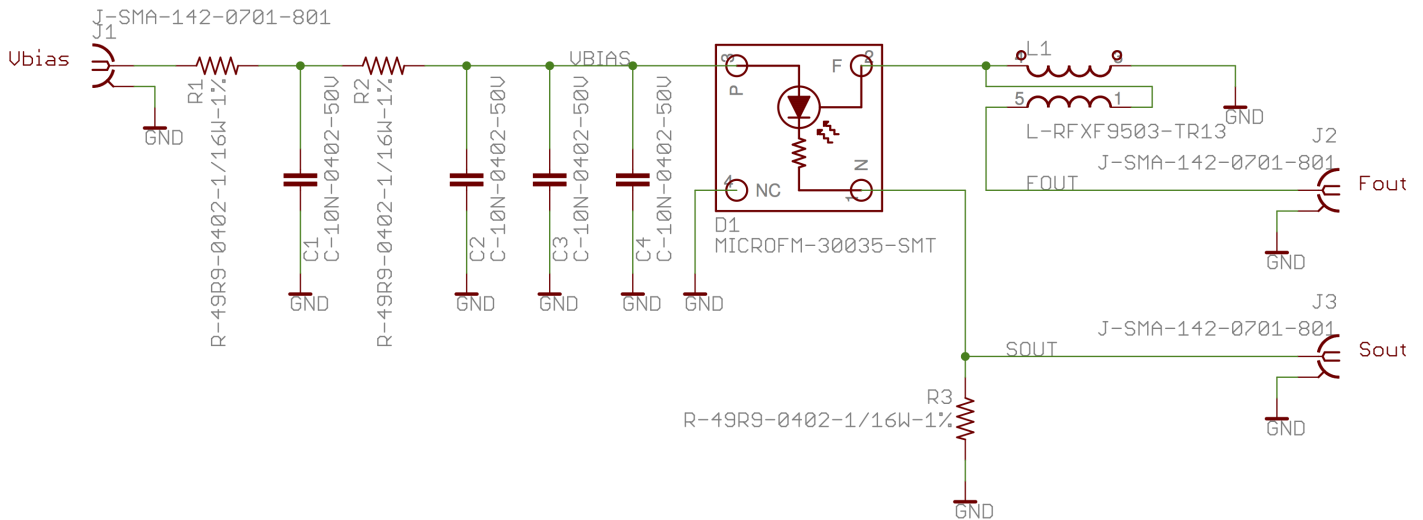

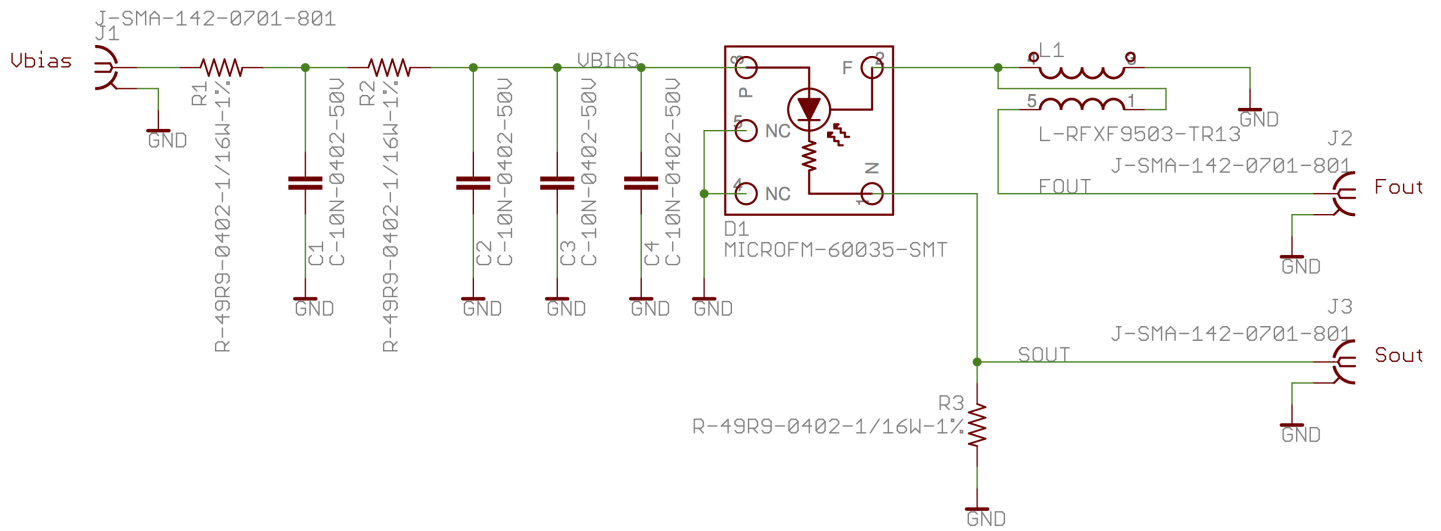*Figure 9, Board schematics for the MicroFM-SMA-300XX (version 2.0)*

Figure 10, Board schematics for the MicroFM-SMA-600XX (version 2.0)

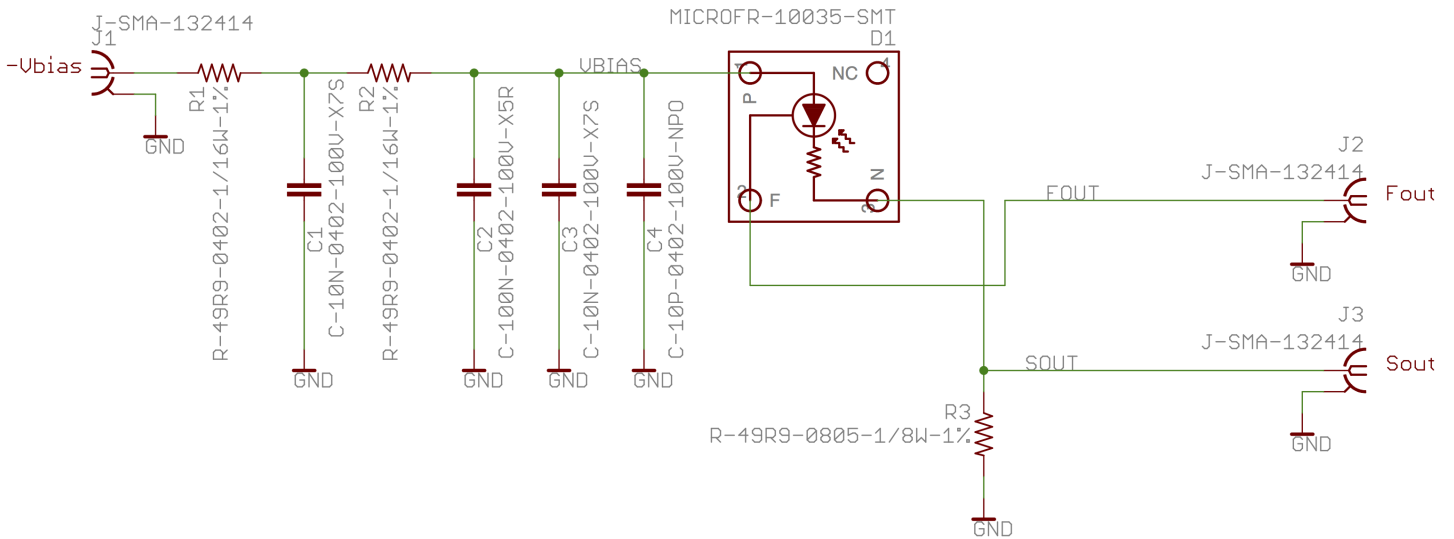## SMA Board Schematics - R-Series

Figure 11, Board schematics for the MicroRA-SMA-100XX and MicroRB-SMA-100XX (version 1.0)

SMA Board CAD

The CAD for each board can be viewed and downloaded from the links below. Note that the CAD may apply to multiple silicon types of a given size and version, e.g. the CAD for the MicroF*X*-SMA-100*XX* is applicable to either M-Series, B-Series or C-Series variants of that board.

To find the version of a given board, please consult the advice on page 2.

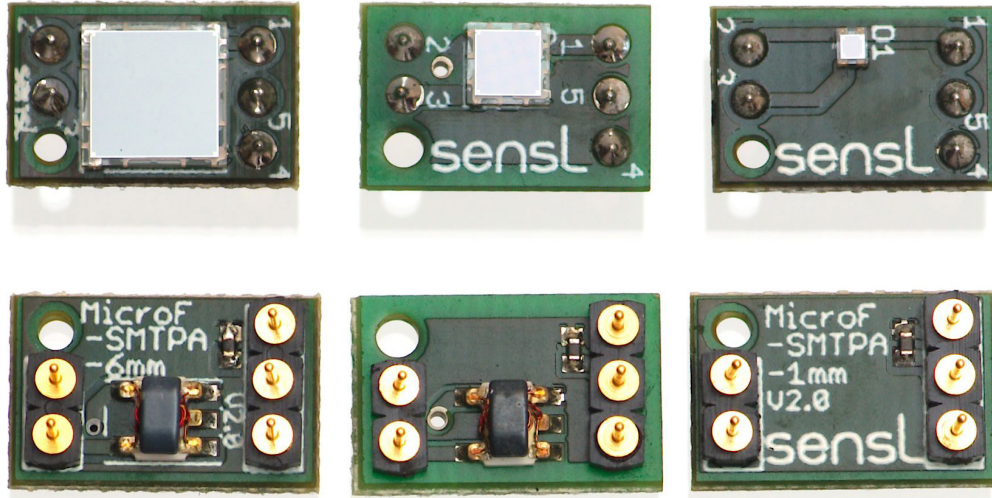| SMA CAD			
Series	Part Number	Version	CAD File Link
M-Series, B-Series, C-Series	MicroF*X*-SMA-**1**00*XX*	2.0	SND0012-Rev.A
	MicroF*X*-SMA-**3**00*XX*		SND0011-Rev.A
	MicroF*X*-SMA-**6**00*XX*		SND0013-Rev.A
	MicroF*X*-SMA-**1**00*XX*	3.1	MicroFX-SMA-100XX
	MicroF*X*-SMA-**3**00*XX*	3.0	MicroFX-SMA-300XX
	MicroFX-SMA-**6**00XX		MicroFX-SMA-600XX
R-Series	MicroRA-SMA-**1**00XX	1.0	MicroRA-SMA-**1**00XX
	MicroRB-SMA-**1**00XX		MicroRB-SMA-**1**00XX

SMTPA BOARDS

Figure 12, (Top) top view and (bottom) bottom view of the SensL SMTPA boards, from left to right 6mm, 3mm and 1mm. The M-, B-, C- and RA-Series versions are all (visually) the same.
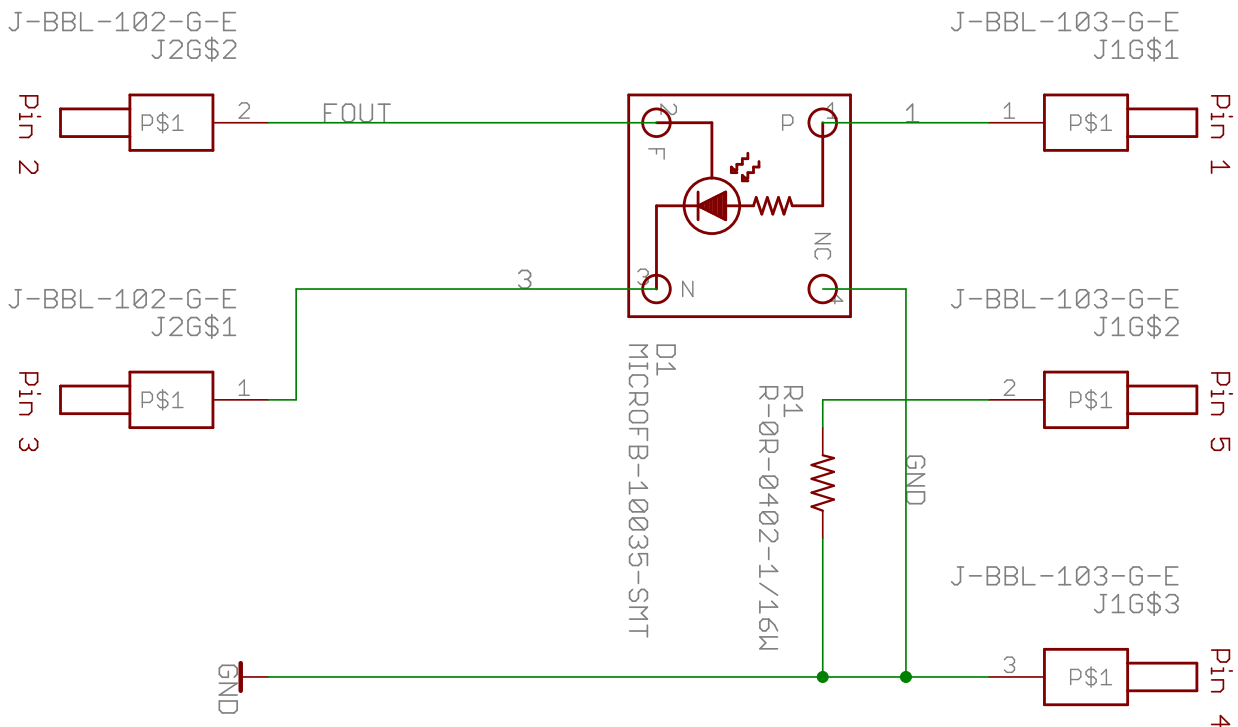
SMTPA Board Schematics - B- and C-Series

Figure 13, Board schematics for the MicroFB-SMTPA-100XX or MicroFC-SMTPA-100XX (version 2.0)
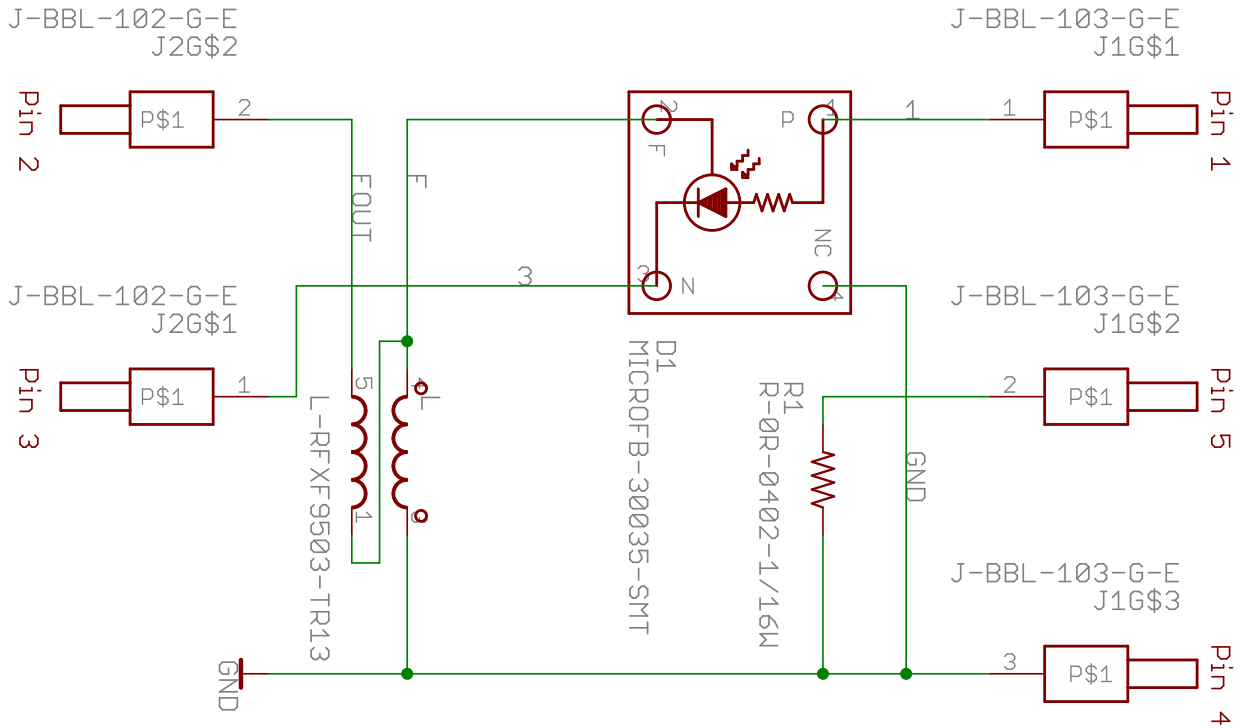
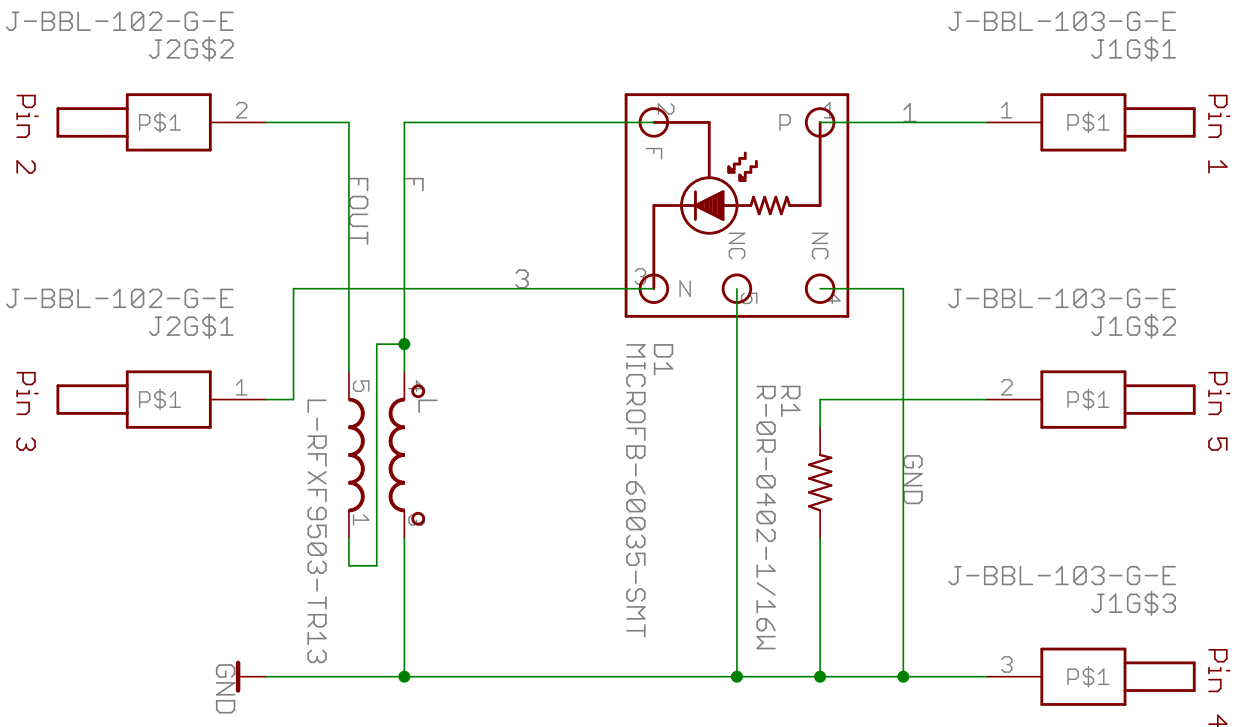*Figure 14, Board schematics for the MicroFB-SMTPA-300XX or MicroFC-SMTPA-300XX (version 2.0)*

Figure 15, Board schematics for the MicroFB-SMTPA-600XX or MicroFC-SMTPA-600XX (version 2.0)

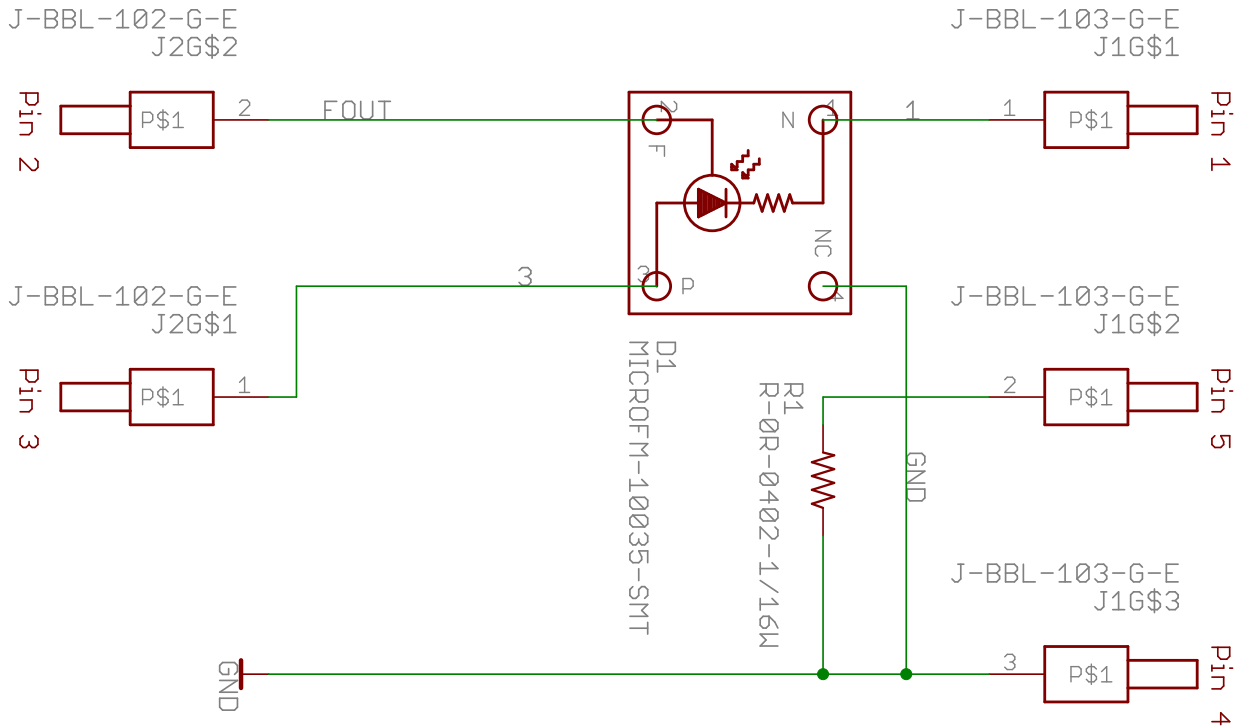## SMTPA Board Schematics - M-Series

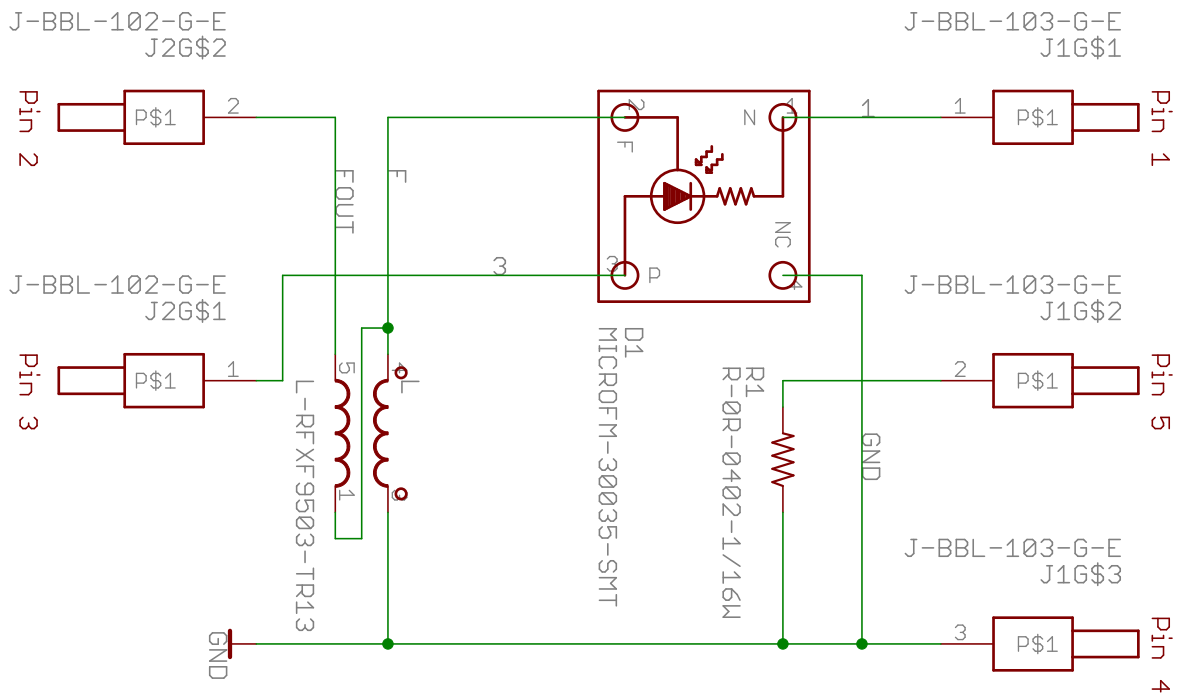*Figure 16, Board schematics for the MicroFM-SMTPA-100XX (version 2.0)*

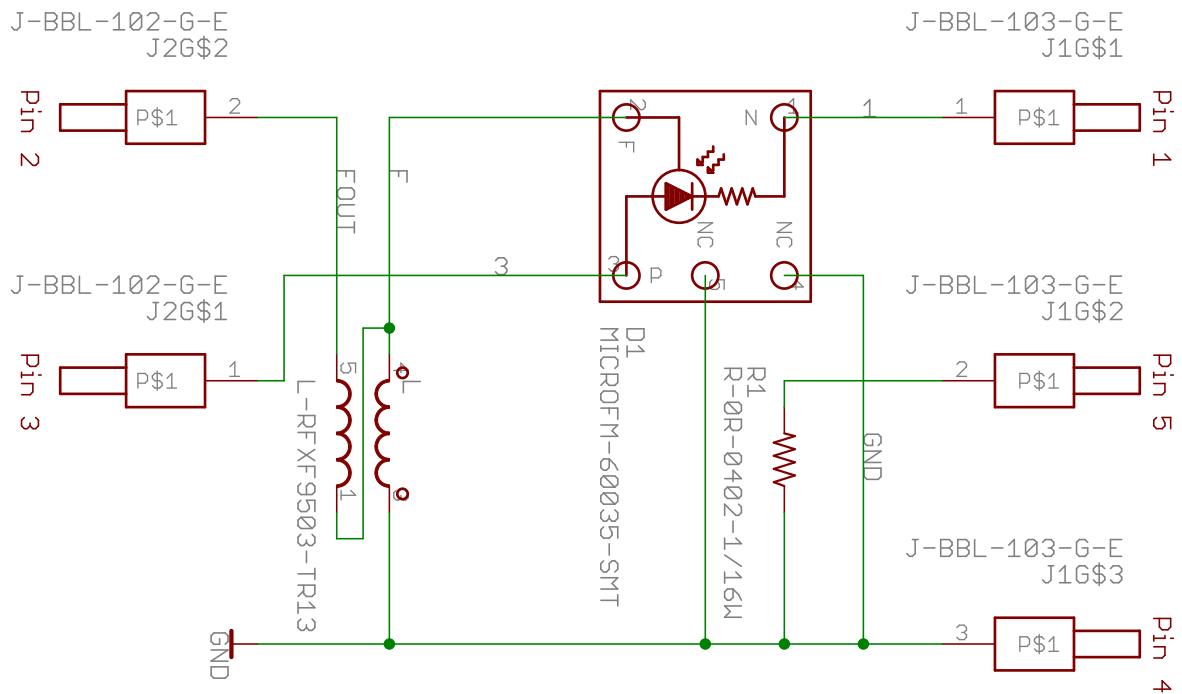*Figure 17, Board schematics for the MicroFM-SMTPA-300XX (version 2.0)*

Figure 18, Board schematics for the MicroFM-SMTPA-600XX (version 2.0)

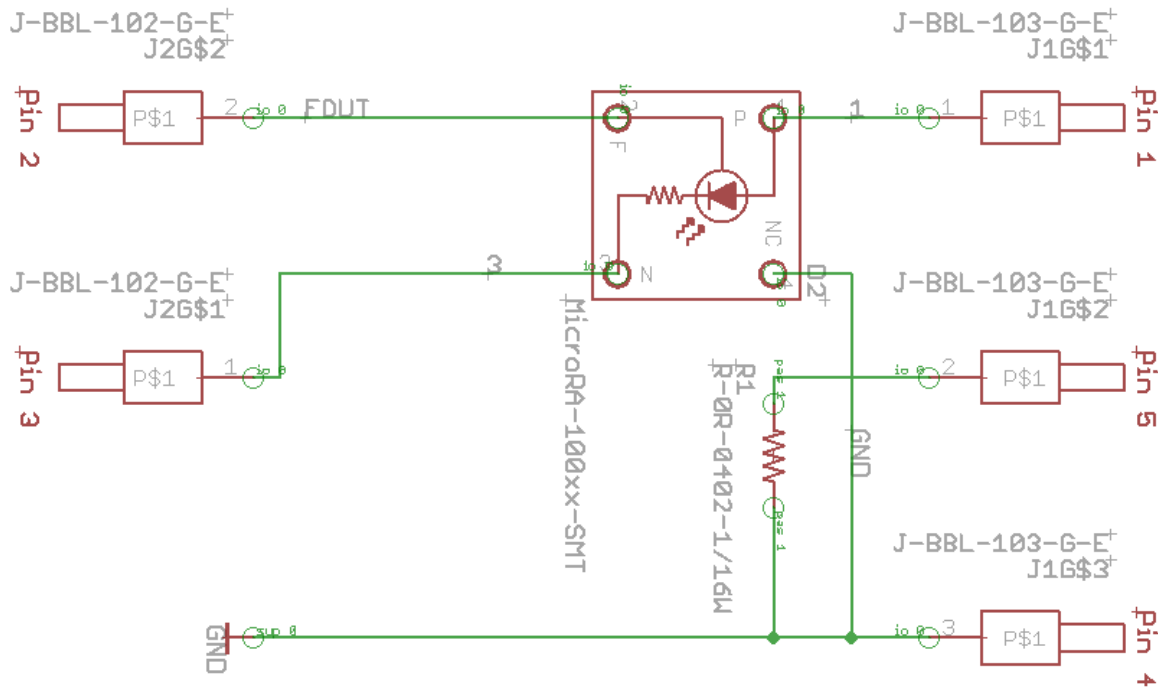## SMTPA Board Schematics - R-Series

Figure 19, Board schematics for the MicroRA-SMTPA-100XX and MicroRB-SMTPA-100XX (version 2.0)

SMTPA Board CAD

The CAD for each SMTPA board can be viewed and downloaded from the links below.

SMTPA CAD			
Series	**Part Number**	**Version**	**CAD File Link**
M-Series	MicroF*X*-SMTPA-**1**00*XX*	2.0	MicroFM-SMTPA-100XX
	MicroF*X*-SMTPA-**3**00*XX*		MicroFM-SMTPA-300XX
	MicroF*X*-SMTPA-**6**00*XX*		MicroFM-SMTPA-600XX
B-Series*, C-Series	MicroF*X*-SMTPA-**1**00*XX*	2.0	MicroFC-SMTPA-100XX
	MicroF*X*-SMTPA-**3**00*XX*		MicroFC-SMTPA-300XX
	MicroF*X*-SMTPA-**6**00*XX*		MicroFC-SMTPA-600XX
R-Series	MicroRA-SMTPA-100XX	2.0	MicroRA-SMTPA-100XX
	MicroRB-SMTPA-100XX		MicroRB-SMTPA-100XX

The pin out for the B-Series is not specified in this document, but it is identical to the C-Series pin out.

All specifications are subject to change without notice