



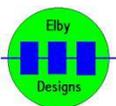
ASM303 - Envelope Follower

Construction Guide

Revision 1.1

PCB Revision 0,3

July 18, 2020



ELBY Designs - Laurie Biddulph

9 Follan Close, Kariong, NSW 2250, Australia

elby-designs@bigpond.com <http://www.elby-designs.com>

ASM303 - Envelope Follower

Construction of the [ASM303](#) requires the assembly of 1 board:-

Column 1 - ASM303 PCB ([3D Model](#))

Constructors should refer to the [Component Overlay](#) for any specific comments regarding the board assemblies, the [Bill of Materials](#) for the current value of all components and [General Construction Notes](#) for general PCB assembly guidelines.

1. Prepare the J202 sub-assembly ([3D Model](#))
2. Fit all components to the board following normal assembly guidelines except R303, R304, D303, D304, D302 and the J102 sub-assembly
3. Mount D304 on the underside of the PCB as shown in figure 1
4. Insert the left legs of R303 and R304 in to their footprint. Insert the cathode of D303 in to the remaining pad of R303. Join the free ends of R303, R304 and D303 and solder into position
5. Mount the sub-assembly and offer up to the front panel securing using the supplied nuts
6. Form the LED, install and solder

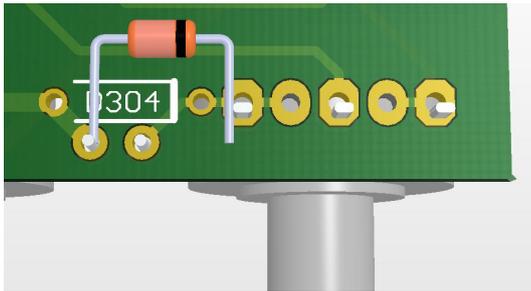


Figure 1: D304 Modification

Calibration

The ASM303 does not need any specific calibration.

P201, which should nominally be set to its approximate mid-position, but can be trimmed to adjust the sampling rate. Increasing the sampling rate will allow the [ENVELOPE] output to closer follow the [IN] signal envelope but will also increase the amount of ripple super-imposed onto the output. Reducing the sampling rate will reduce the super-imposed ripple but will cause the output to be less accurate in the following the input signals envelope.

The user should adjust P201 for the best response suited to their needs. An oscilloscope such as our ED702 is needed to perform this adjustment

