PP-FP0153: Interconnect Cover

Oliver Darling

October 22, 2018

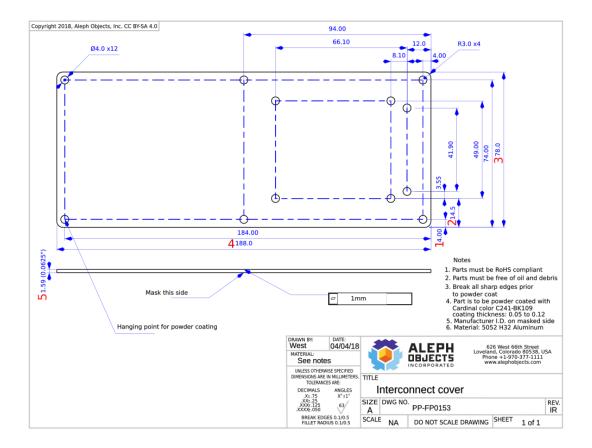


Figure 1: Schematic of PP-FP0153.

1 Dimension 1 & 2



Figure 2: Dimension 01

Using a 3.70mm pin gauge and the back end we can measure each hole from the outside perimeter of the part. The hole is 4mm in diameter, so we should expect the hole to be $2.30 \pm 0.25mm$, and this defines the lower control limit to be 2.05mm and a upper control limit of 2.55mm. This measurement will be taken for each outer hole that is similarly spaced around the edge for a total of 10 measurements per part.

This process will be repeated for for dimension 2 except for here you only want the distance to the long edge. The resulting dimension should be around $12.5 \pm 0.75mm$ or a upper control limit of 13.25mm and a lower control limit of 11.75mm.

2 Dimension 3 & 4



Figure 3: Dimension 03



Figure 4: Dimension 04

For Dimension 3 we use the calipers to measure the short length across all the parts measuring $78.0 \pm 0.75mm$. This will result in a upper control limit of 78.75mm and a lower control limit of 77.25mm.

This process will be repeated for Dimension 4 using the large calipers to measure the long distance of $188.0 \pm 0.75mm$. Resulting upper control limit of 188.75mm and a lower control limit of 177.25mm.

3 Dimension 5



Figure 5: Dimension 05

We use a micrometer to measure the thickness of each part to check if its within tolerance of $1.59 \pm 0.25mm$. This results in a upper control limit of 1.34mm and 1.84mm.