Tolerances for Die-Cut Parts Based on RMA Standards

Tolerances on length and width dimensions of parts.

Length and Width

Part Requirement Tolerances	Standard	Non-Critical
Inches		
For thickness up to .25 in	+/- 0.032	+/-0.040
For thickness over .25 to .50 in	+/- 0.040	+/- 0.050
For thickness over .50 in	+/- 0.040	+/- 0.050
Millimeters		
For thickness up to 6.3mm	+/- 0.80	+/- 1.0
For thickness over 6.3 to 12.5 mm	+/-1.0	+/-1.25
For thickness over 12.5 mm	+/-1.25	+/-1.6

Separate schedules of length and width tolerances are listed for diffrent thickness of these materials because of the "Dish" effect in die-cutting. This is more noticeable as the thickness increases. As shown in the drawing below, the "dish" effect is a concavity of die-cut edges (due to the squeezing of the material by the pressure of the cutting die.)

The width "W" (or length) at the top and bottom surface are slightly greater than the width at the center.





See Example Below

Example: The print below shows how tolerances are calculated



Special note: Due to CGR's experience in cutting we are able to hold tighter tolerances than RMA suggests. Please contact CGR at (877) 313-6785 with your specific application.

