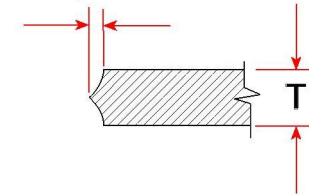


# Photoetching - Typical Dimensional Tolerances

Typical Edge Profile when Etched from both sides

Cusp = 20% T



## Etched Dimensional Tolerance

Metal Thickness (T)	Tolerance
< 0.35 mm	$\pm 0.05$ mm
$\geq 0.35$ mm	$\pm 15\%$ of T

Min. Outside Rad (R) =  $1/3T$

Min. Etching Line (L) = 0.10 mm

## Min. Cut Out (Holes or Slots)

Metal Thickness (T)	Min. hole size
$\leq 0.20$ mm	1.3 T
0.25 mm	0.28 mm
$\geq 0.30$ mm	T



Min. Inside Rad (R) =  $2/3T$

Centre to Centre Distance (Positional Tolerance) Better than  $\pm 0.013$ mm

Metal Thickness (T)

## Min. width of a bar between openings

Metal Thickness (T)	Min. land size
$\leq 0.20$ mm	1.3 T
0.25 mm	0.28 mm
$\geq 0.30$ mm	T

From Exella's experience we advise the technical designers to comply with the dimensional tolerances indicated here, and also to take into consideration that the type of material, the thickness and the shape of the piece can influence on the tolerances. Possible guaranteed characteristics will be pre-emptively accorded.