

# PRODUCT BULLETIN

## 0.40mm Series 480 Drill Design Revision

Kyocera Tycom Corporation 9/01/07

### Abstract

Kyocera Tycom continues to redesign its product line to improve hole quality and tool strength. The 0.40mm is the latest revision in the series. The new design improves upon all aspects of the drill hole as compared the older design.

KTC will deplete existing inventory and transition customers to the new product. The change will be seamless to all users aside from a temporary part number change, eventually **the part number will revert to the current part number.**

	<i>ringed</i>	<i>ringless</i>
temporary part number	<b>480.0157.295B1</b>	<b>480-0157.295B1</b>
long term part number	<b>480.0157.295</b>	<b>480-0157.295</b>

### KTC Qualification (Series 480 Comparison)

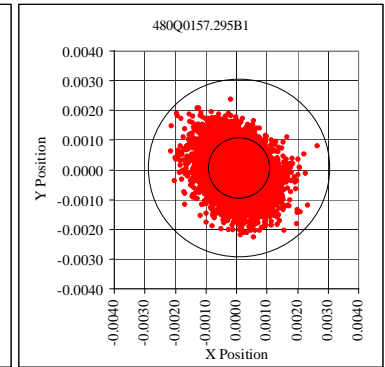
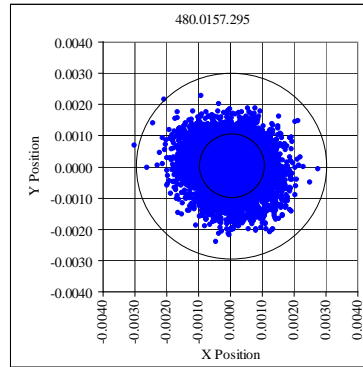
Lab and beta site tests were conducted to ensure the product performed at an improved level that is both reliable and repeatable.

#### Parameters / Comparative Results

##### Hole Location

Material: High Tg  
 Thickness: 0.186" Hit Count: 1,500  
 Copper Content: 30 Layers

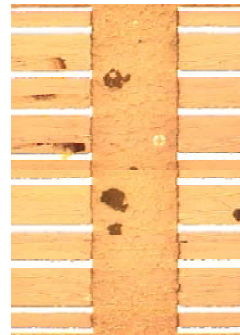
		True Position Deviation		
	Part Number	Mean	StdDev	Median
current	480.0157.295	0.00088	0.00047	0.00082
proposed	480Q0157.295B1	0.00086	0.00045	0.00081
<b>p-value:</b>	<b>0.000</b>			



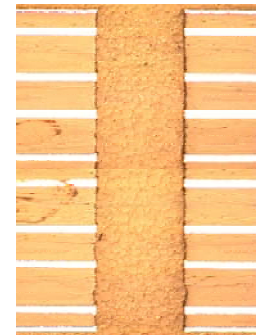
##### Hole Wall Quality

Material: High Tg  
 Thickness: 0.186" Hit Count: 1,500  
 Copper Content: 30 Layers

	Ave Max Gouging (in)	Ave Max Nail Heading
480.0157.295	0.00035	158%
480Q0157.295B1	0.00031	153%
<b>p-value</b>	<b>0.001</b>	<b>0.000</b>



480.0157.295



480Q0157.295B1

##### Tool Life / Robustness

Material: High Tg  
 Thickness: 0.186"  
 Copper Content: 30 Layers

		Infeed at Breakage	
	Mean	StdDev	
480.0157.295	388	14.0	
480Q0157.295B1	400	0.0	
<b>p-value</b>	<b>0.015</b>		

