

QCS-250-500-GSG-A

250-500µm Pitch, GSG

Features:
* High Precision

Applications:
* Calibration
* Laboratory Test

Electrical

| | |
|-----------------------------|-----------|
| Pitch: | 250-500µm |
| Configuration: | GSG |
| Dielectric Constant: | 9.9 |
| Thru Delay: | 1.86ps |
| DC Accuracy ^{*1} : | ±0.3% |
| Impedance ^{*2} : | 50Ω |

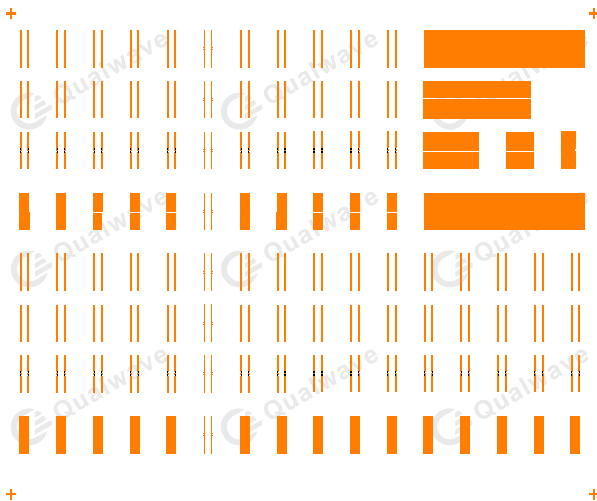
[1] Ensure the bias supply is turn off during calibration. Applying bias to the probe during calibration could cause the resistance of the load to change.

[2] For optimum calibration accuracy only the Red-marked load standards should be used.

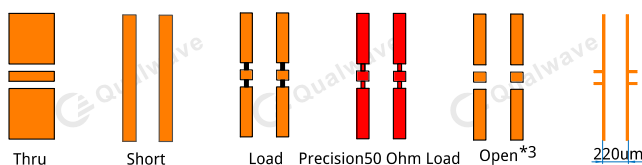
Mechanical

| | |
|--------------------|---------------|
| Material: | Alumina |
| Outline Dimension: | 15*20mm |
| Thickness: | 25mil (635µm) |

Outline Drawings



Substrate



[3] By default, an Open is synthesized by raising the probes in air a minimum

distance of 250 µm above the chuck surface. A substrate Open structure is also provided as an alternative.

Verification Line^{*4}

| | | | | | |
|----|-----|-----|------|------|------|
| ps | 3 | 7 | 14 | 27 | 40 |
| µm | 450 | 900 | 1800 | 3500 | 5250 |

[4] Verification line lengths are signal conductor edge-to-edge dimension.

All of the above specification are based on an overtravel (downward movement of probe after initial touchdown on the substrate) listed above. This amount of overtravel can set before calibration on the Impedance Standard Substrate use the alignment marks(allows precise setting of Probe separation and overtravel) . Figure 1 shows that initial contact with the edge of the Probe tips should be made at reference plane X. The desired overtravel and thus skate(forward movement of probe tips after initial contact with substrate) is then achieved by adjusting the Z height the positioner to move the edge of the Probe tips to reference plane Y. This can be seen from the images shown in Figure 2.

Installation Diagram

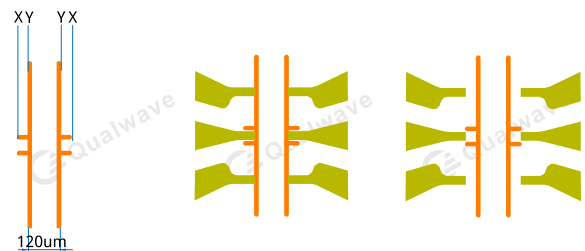


Figure 1: Alignment marks

Figure 2: Images showing correct alignment and placement of probe tips

Calibration Coefficients are dependent on the probe tip configuration, placement on a standard, and the standard configurations. This leads to unique calibration coefficients for a unique pair of probe and ISS. Therefore, the calibration coefficients are supplied with the probe not with the ISS.

How To Order

QCS-250-500-GSG-A

Customization is available upon request.