

This concept is a flexible heating track (e.g. copper-nickel alloy), laminated between a flexible polyimide (e.g. Kapton) substrate.

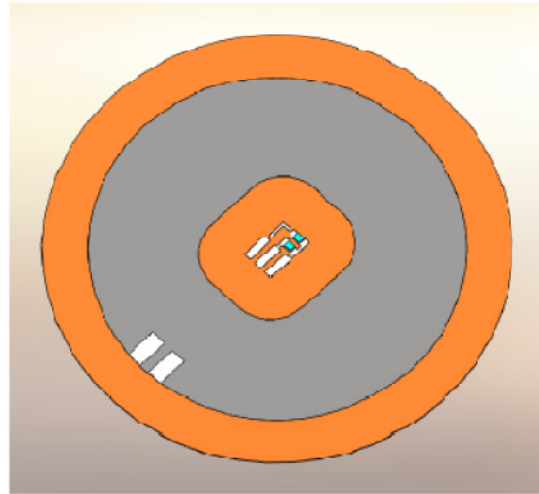
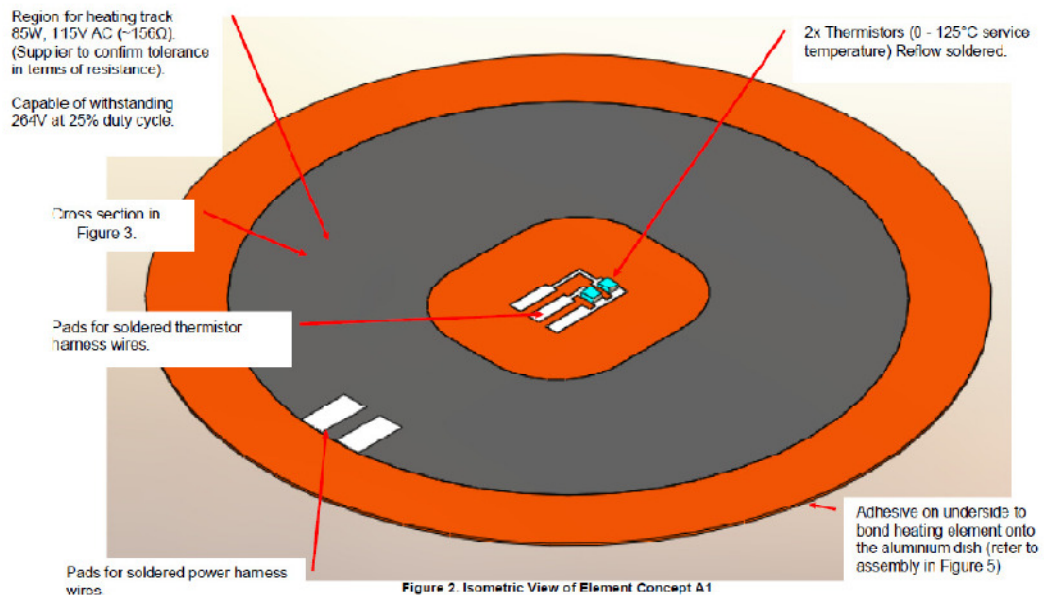


Figure 1: Isometric View of Concept A1 (harnesses excluded). Grey area indicates region for copper heating track.



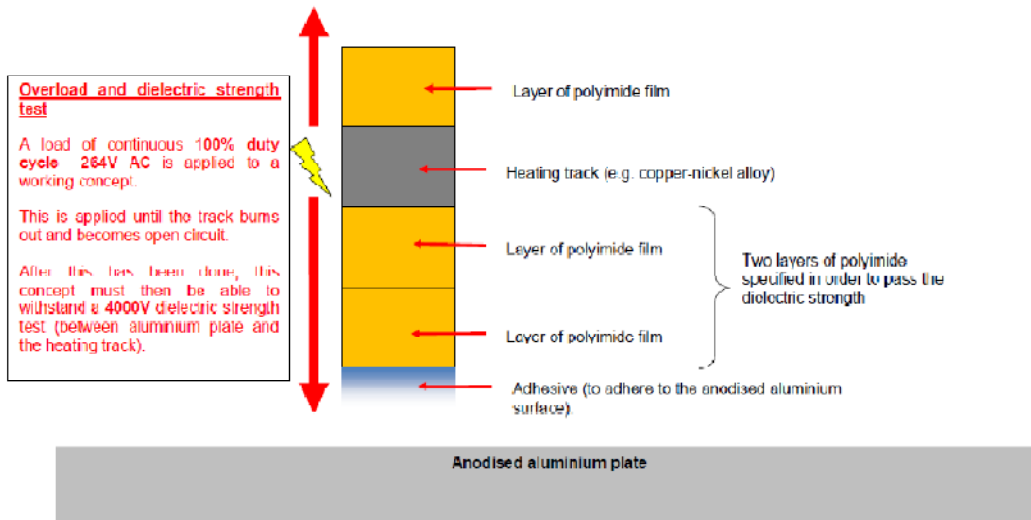


Figure 3: Cross section of the flexible element

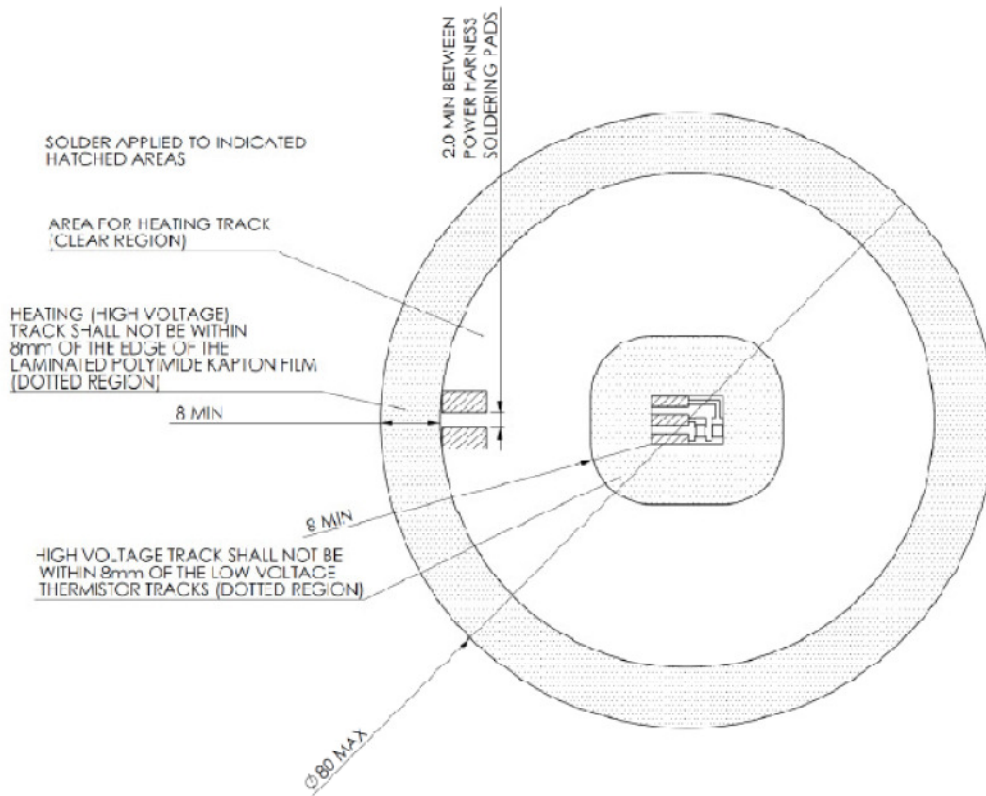


Figure 4. Dimensions of Element Concept A1

- √ 2 x SMT THERMISTORS TO BE LOCATED IN THE CENTRE OF THE ELEMENT
(ACCURACY: R 1%, B 1%)
- √ 4 x THERMISTOR LEAD WIRES TO BE SOLDERED TO THE THERMISTOR TRACKS
- √ 2 x POWER LEAD WIRES TO BE SOLDERED TO THE POWER TRACKS
- √ ALL EXPOSED SOLDER JOINTS TO BE ENCAPSULATED TO WATERPROOF STANDARD
- √ SUBSTRATE MUST INSULATE HEATING TRACK TO 4kV ON REVERSE SIDE (INTO THE PAGE)
- √ SUBSTRATE MUST BE WATERPROOF ON TOP SIDE (OUT OF THE PAGE)
- . OPERATING VOLTAGE IS 115V
- . POWER TRACK RESISTANCE MUST BE $156\Omega \pm 5\%$
- . ALL MATERIALS USED MUST BE UL RATED TO WITHSTAND 100°C
- 3. ALL MATERIALS USED MUST BE ROHS COMPLIANT

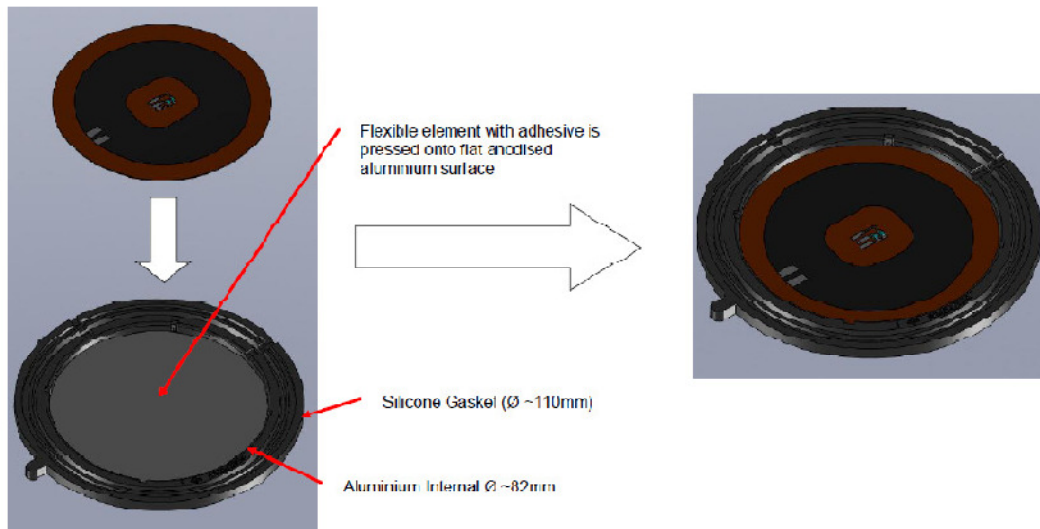


Figure 5: Assembly of Element onto anodised aluminium

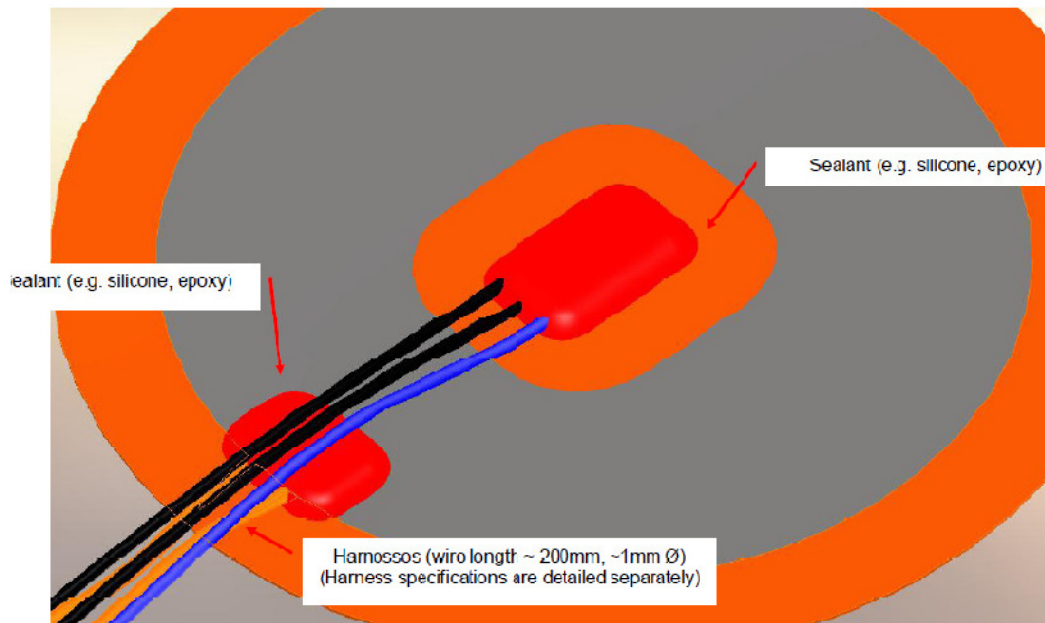


Figure 6: Harnesses soldered and terminals covered with sealant.