

**AVC** ASIA VITAL COMPONENTS CO.,LTD.

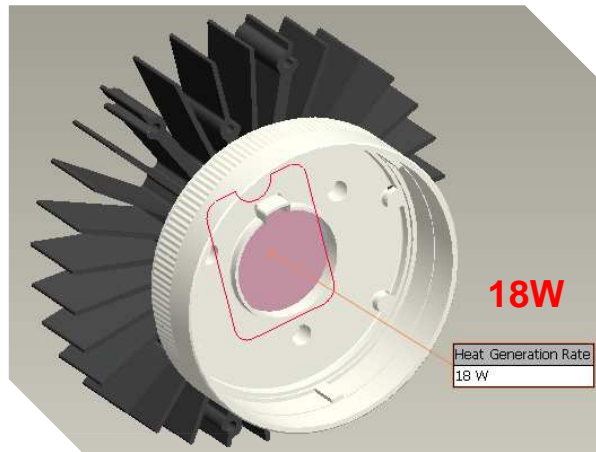
## **Thermal simulations for Toshiba 20w LLE**

**with Ø125\*20mm heatsink (AVC PN: ST06U00001)**

**Software : Pro/E 3.0 & FloEFD.pro 9**

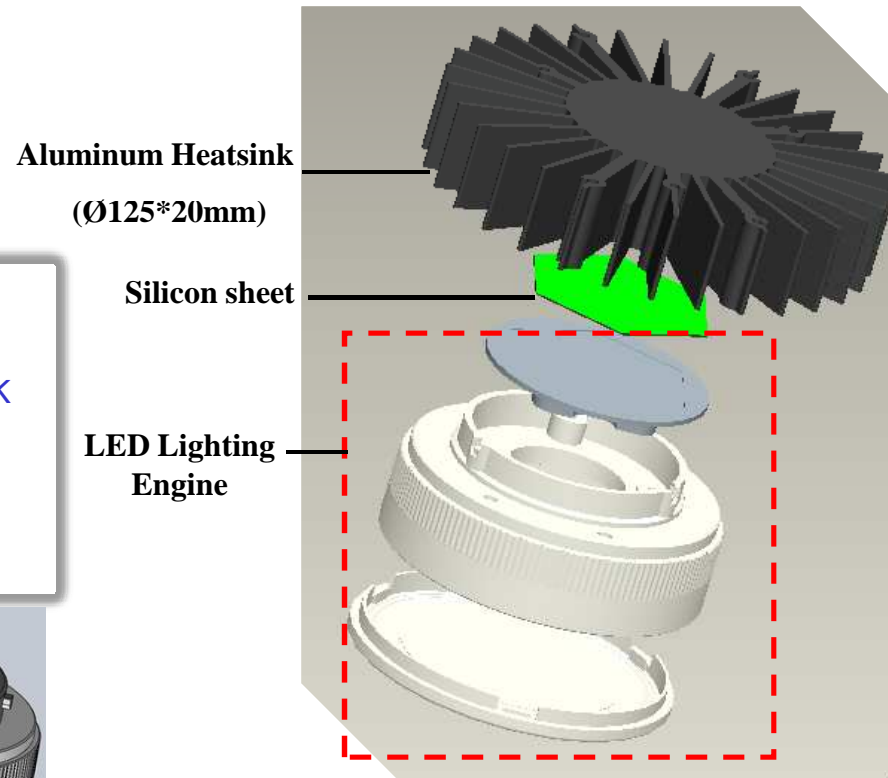
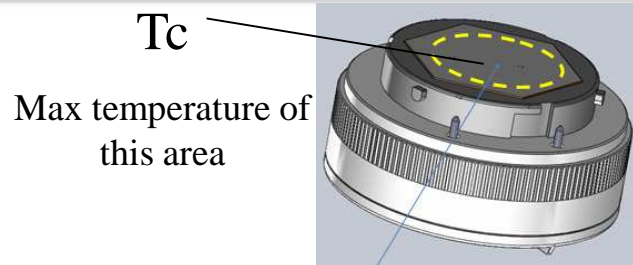
# Passive solution

## Thermal Power

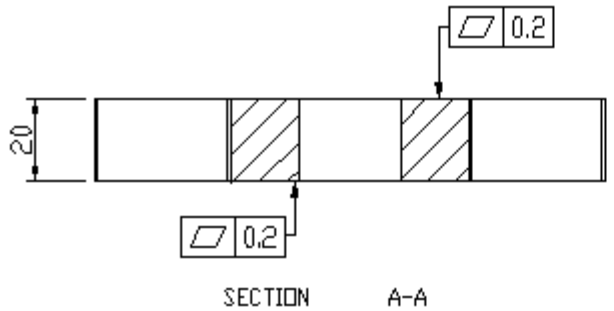
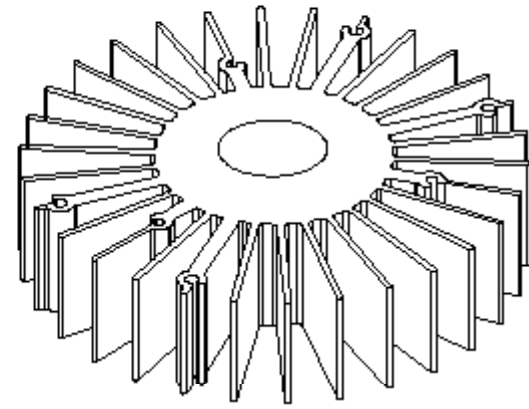
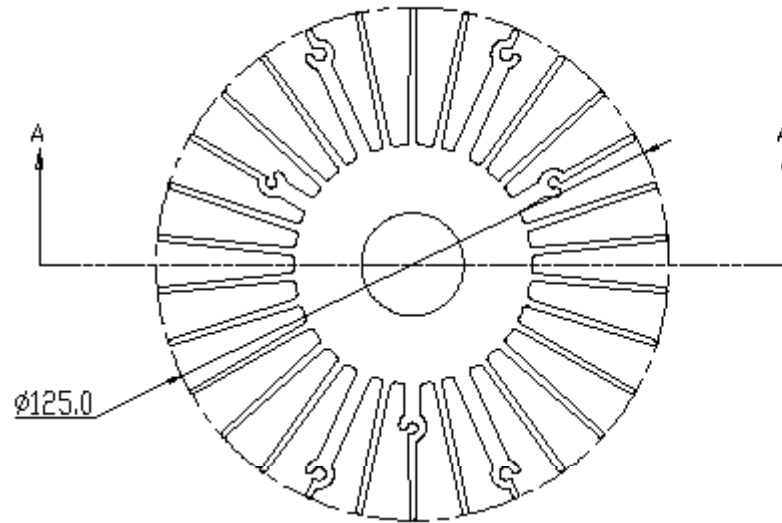


**The purpose of simulation:**  
To find out how much the Tc will be when assemble it with a 20mm height heat sink.

**Simulation conditions :**  
Heat sink: Al 6063 (201W/m\*K)  
Thermal Conductivity of the silicon sheet :2.8W/m\*K  
Assuming 90% electrical power transferred to heat.  
Thermal power:2 0\*0.9=18W  
Ta=35°C



## Drawing of the heatsink



Aluminum Extrusion Heatsink  
Dimensions :  $\phi 125 * H20$ mm  
Weight:0.27kg  
Surface : Anodizing  
Color: Black