

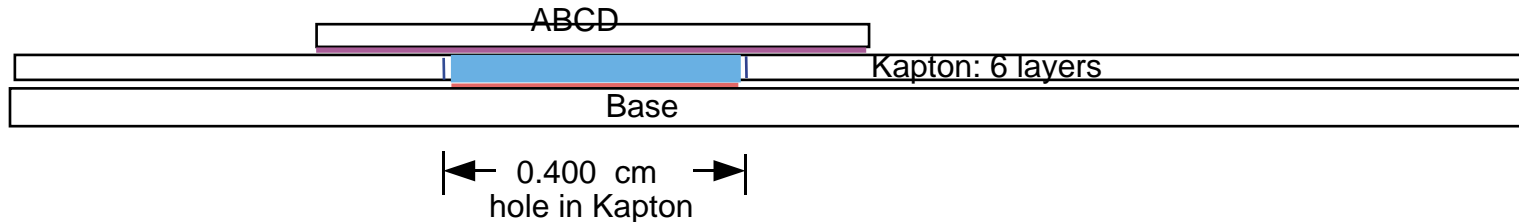
# Aluminum Nitride Cylinder as ABCD Heatsink

$$\text{AlN: } 0.5W \{ 330 \text{ um} / (165 * 11.3 \text{ mm}^2) = 0.09 \text{ degree}$$

$$\text{Ag epoxy: } 0.5W \{ 25 \text{ um} / (1.6 * 11.3 \text{ mm}^2) = 0.7 \text{ degree}$$

$$\text{Diamond epoxy: } 0.5W \{ 25 \text{ um} / (2.57 * 11.3 \text{ mm}^2) = 0.43 \text{ degree}$$

Total: 1.22 degree



AlN cylinder 3.8 mm\* 330 um high  
165 W/m\*K

Tra-con Supertherm 2003 diamond filled epoxy  
2.57 W/m\*K

Silver epoxy, 1.6 W/m\*K