

## Foil Heaters using Pyralux® Adhesive

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed Kapton® Foil heaters using Pyralux adhesive for power rating of 2.5 Watts per square inch. Using the technology, heaters of different sizes and resistances are fabricated, tested and implemented on the satellite components for temperature rise so that components are maintained above its lower operating limit.



### Salient Features

- ✦ The heaters are thin flexible heating elements laminated between insulating layers of Kapton®
- ✦ Heater sizes and Resistances can be varied as per the requirement.
- ✦ Heaters are qualified to NASA-GSFC-S-311-79 standard.
- ✦ Heaters of insulation resistance more than Gohm.
- ✦ Dielectric strength is more than 500 Vrms.

### Major Specifications

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|-------------------------------|---|
| ✦ Power Rating                | : 2.5 Watts per sq.in in still air.                 |
| ✦ Heater leads                | : 26AWG, Kapton insulated and 0.5 m long.           |
| ✦ Resistance tolerance        | : $\pm 10\%$ .                                      |
| ✦ Operating temperature range | : $-65^{\circ}\text{C}$ to $+150^{\circ}\text{C}$ . |
| ✦ Mounting Method             | : Using transfer adhesive.                          |

## Technology Transfer

URSC-ISRO offers to transfer this technology of Kapton® Foil heaters using Pyralux adhesive developed by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

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🌐 <https://www.ursc.gov.in/industry/index.jsp>