

INFRARED

L A B O R A T O R I E S

4.2K General Purpose composite bolometer-LHe cooled

2.5 mm round diamond absorber with coating

10 M ohm load resistor

Operates from 15 microns out to 3000 microns

- **Thermal Conductance**
 - $G[\mu\text{W/K}] \sim 16$
- **Bolometer Resistance**
 - $R_o[\text{M}\Omega] \sim 10 \text{ to } 20$
- **Electrical Sensitivity**
 - $S[\text{V/W}] \sim 2.4 \times 10^5$
- **Noise Equivalent Power**
 - $\text{NEP}[\text{W/Hz}^{1/2}] \sim 1.2 \times 10^{-13}$
- **Noise**
 - $V_n[\text{nV/Hz}^{1/2}] \text{ at } 80 \text{ Hz} \leq 80$

1.6K General Purpose composite bolometer-LHe cooled

2.0 mm round diamond absorber with coating

20 M ohm load resistor

Operates from 15 microns out to 3000 microns

- **Thermal Conductance**
 - $G[\mu\text{W/K}] \sim 12$
- **Bolometer Resistance**
 - $R_o[\text{M}\Omega] \sim 77$
- **Electrical Sensitivity**
 - $S[\text{V/W}] \sim 7.5 \times 10^5$
- **Noise Equivalent Power**
 - $\text{NEP}[\text{W/Hz}^{1/2}] \sim 4.6 \times 10^{-14}$
- **Noise**
 - $V_n[\text{nV/Hz}^{1/2}] \text{ at } 80 \text{ Hz} \leq 40$