

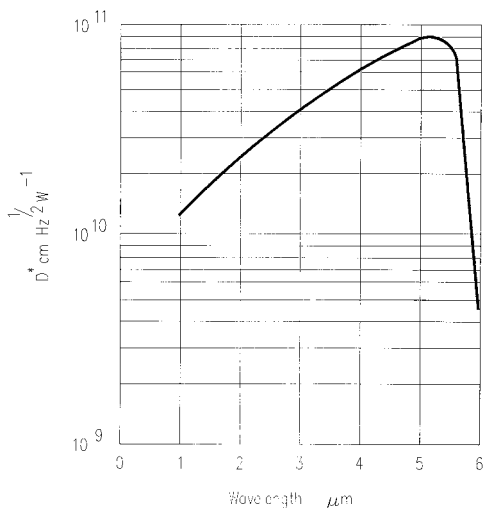
OL 740-18 and OL 740-19 Infrared Detector Modules

OL 740-18 InSb Detector

The OL 740-18 InSb Detector is a high-sensitivity infrared detector for use over the 1.0 to 5.5 μm wavelength region. It has a peak response at 5.2 μm . For optimum performance, the detector is operated in the photovoltaic (zero bias) mode and liquid nitrogen (LN_2) cooled to 77K. The 2 mm diameter detector element is mounted in a metal, side viewing dewar with metal-to-metal seals for high vacuum integrity and reliability. The dewar is mounted in an anodized aluminum housing with a standard 1.5 inch detector port, CaF_2 field lens, and BNC signal connector.

OL 740-18 SPECIFICATIONS

Operating Temperature77K
 D^*_{Peak} , 163.4 Hz $9 \times 10^{10} \text{ cmHz}^{1/2}\text{W}^{-1}$
 Wavelength Region 1 to 5.5 μm
 Peak Wavelength 5.2 μm
 Dynamic Impedance500K
 Area 2 mm diameter
 Window Sapphire
 Field Lens (focal length) 12.7 mm
 Field of View60° cold aperture
 Dewar Hold Time 6 hours



OL 740-19 HgCdTe Detector

The OL 740-19 Mercury Cadmium Telluride Detector is optimized for use over the 8.0 to 14.0 μm wavelength region; however, it can be used to wavelengths as low as 1 μm . Other versions of the OL 740-19 can be supplied which are sensitive out to 22 μm . The biased HgCdTe detector has a low impedance and is operated in the photoconductive mode with an AC coupled, ultra low-noise preamp (OL 740-19A). The 2 x 2 mm detector element is mounted in a metal, side viewing dewar with metal-to-metal seals for high vacuum integrity and reliability. The dewar is mounted in an anodized aluminum housing with a standard 1.5 inch port, KBr field lens, and BNC signal connector.

OL 740-19 SPECIFICATIONS

Operating Peak77K
 D^*_{Peak} , 163.4 Hz $1 \times 10^9 \text{ cmHz}^{1/2}\text{W}^{-1}$
 Wavelength Region 1 to 14 μm
 Peak Wavelength 13 μm
 Resistance 350 ohm (77K)
 Area 2 x 2 mm
 Window KRS-5
 Field Lens (focal length) 12.7 mm
 Field of View 60° cold aperture
 Dewar Hold Time 6 hours

