



**Description**

The J15InSb Series device consists of a high quality InSb detector mounted in a "sandwich" configuration over a HgCdTe detector.

The InSb detector responds to incident radiation from 1 to 5  $\mu\text{m}$ , while the HgCdTe detector responds to radiation from 6 to 13  $\mu\text{m}$ . Devices with response to longer wavelengths are also available.

The detector focal planes are spaced within 0.5 mm and their centers are aligned to within 0.15 mm.

The detectors operate at 77°K and are mounted in the standard M204 or M205 metal dewar with ZnSe window.

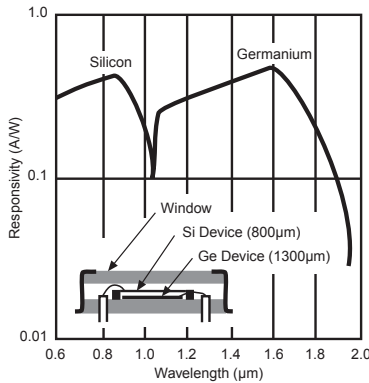
The InSb and HgCdTe elements require separate preamplifiers.



**Applications:**

- Dual Wavelength Power Meters
- Pyrometers
- Improved Linearity Detector for FTIR

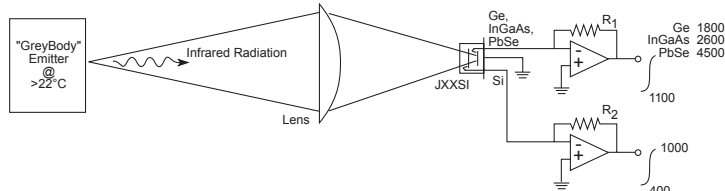
**Relative Response vs Wavelength for J15InSb Series "Sandwich" Detector**



**Dual Wavelength Power Meter Application**



**Two-color Temperature Sensor Application**



**Typical Specifications J15InSb Series @77°K**

Model Number	Part Number	Active Size (mm)	Wavelength Range (20% cutoff for HgCdTe) ( $\mu\text{m}$ )	Typical Peak Responsivity	Typical Peak $D^*$ ( $\lambda_{\text{peak}}, 10\text{KHz}$ ) ( $\text{cmHz}^2/\text{W}^{-1}$ )	Dewar Packages	
						Standard	Options
J15InSb-M204-S01M-60	InSb HgCdTe 450662	1.0	1 to 5.5 6 to 12	2A/W 1500V/W	$1 \times 10^{11}$ $2.5 \times 10^{10}$	M204 Metal Sideview (See Catalog)	Shown in Catalog
J15InSb-M204-S02M-60	InSb HgCdTe 450736	2.0	1 to 5.5 6 to 12	2A/W 500V/W	$1 \times 10^{11}$ $2 \times 10^{10}$		
J15D14InSb-M204-S01M-60	InSb HgCdTe 450107-1	1.0	1 to 5.5 6 to 13.5	2A/W 1000V/W	$1 \times 10^{11}$ $2 \times 10^{10}$		
J15D14InSb-M204-S02M-60	InSb HgCdTe 450052-2	2.0	1 to 5.5 6 to 13.5	2A/W 500V/W	$1 \times 10^{11}$ $2 \times 10^{10}$		
J15D16InSb-M204-S01M-60	InSb HgCdTe 450155	1.0	1 to 5.5 6 to 16.6	2A/W 500V/W	$1 \times 10^{11}$ $1 \times 10^{10}$		

Please consult factory for other sizes and wavelengths.

Information in this document is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.