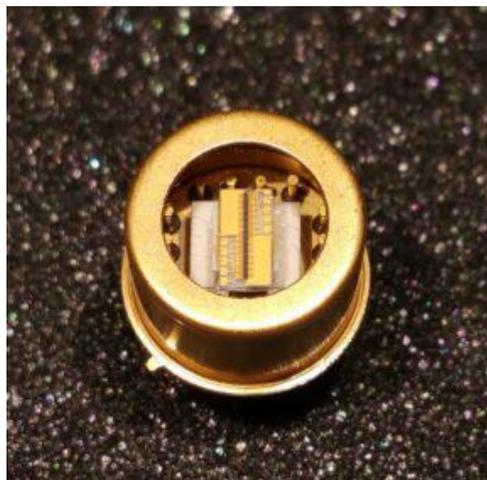


PbSe 3 Watt Cooled Photoconductive IR Detectors

TE Cooled Infrared Detectors with Fast Response and Ultra-High Sensitivity in the 1 – 5.5 μm Wavelength Band



Ambient Temperature:	+25°C
Detector Operating Temperature:	see model types below
Typical Cooler Power at or near Max. Cooling:	1.8 volts @ 1.2 amps

Standard Specifications – Electrical

All detector specifications are at a bias voltage of 35 V/mm distance between electrodes applied across the detector and with a one MegOhm load resistor in series. All specifications apply at or near maximum cooling with the heat sink @ +25°C.

	Minimum	Typical	Maximum	Units
Wavelength of Max. Response	4.3	4.5		μm
D*(λ_{pk}, 1050 Hz, 1 Hz)	2.0 x 10 ¹⁰	3.5 x 10 ¹⁰		cm Hz ^{1/2} w ⁻¹
Element Resistance (Dark)	1.0	6.0	20.0	MegOhm
Time Constant (not typically measured)		12	25	μsec
Rated Element Temperature			+85	°C
Delta T at or near Max. Cooling		SEE BELOW		°C

When using the table below, remove parenthesis and insert appropriate designation for package type in the space. Example: 6 for TO-66, 8 for TO-8.

Model Number	Element Size(mm)	Responsivity (I _{pk} , 1050) v/w		Operating Temp	Standard Package Options
		Minimum	Typical		
B1-()C4T	1 x 1	126,000	190,000	-50°C	TO-66, TO-8
B2-()C4T	2 x 2	63,000	95,000	-50°C	TO-66, TO-8
B3-()C4T	3 x 3	38,000	56,000	-45°C	TO-66, TO-8
B6-()C2T	6 x 6	18,000	27,000	-25°C	TO-66, TO-8
* Minimum D*(I _{pk} , 1050, 1) > 1.5 x 10 ¹⁰ cm Hz ^{1/2} w ⁻¹ *					

To specify thermistor option for all TE cooled detectors, add the suffix -T or -TC (calibrated) to the model number.