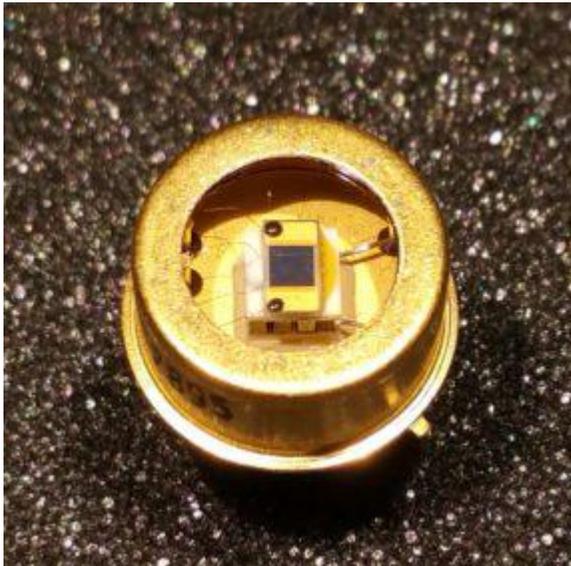


PbSe 2 Watt Cooled Photoconductive IR Detectors

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



Ambient Temperature:	+25°C
Detector Operating Temperature:	-35°C
Typical Cooler Power at or near Max. Cooling:	0.9 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	4.1	4.3		μm
D*(λ_{pk}, 1050 Hz, 1 Hz)	1.6 x 10 ¹⁰	3.0 x 10 ¹⁰		cm Hz ^{1/2} w ⁻¹
Element Resistance (Dark)	1.0	5.0	15.0	MegOhm
Time Constant (not typically measured)		9	20	μsec
Rated Element Temperature			+85	°C
Delta T at or near Max. Cooling	55	60		°C

When using the table below, remove parenthesis and insert appropriate designation for package type in the space. Example: 7 for TO-37, 8 for TO-8.

Model Number	Element Size (mm)	Responsivity (I_{pk}, 1050) v/w		Standard Package Options
		Minimum	Typical	
B1-()C3T	1 x 1	66,000	100,000	TO-37, TO-8
B2-()C3T	2 x 2	33,000	50,000	TO-37, TO-8
B3-()C3T	3 x 3	22,000	33,000	TO-37, TO-8

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