

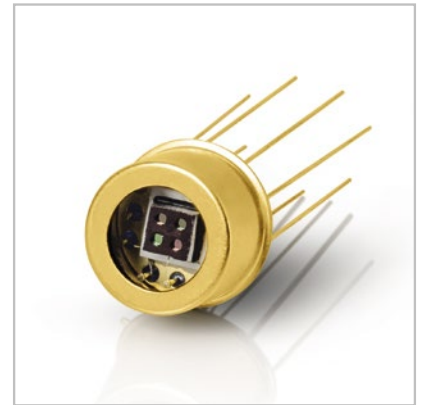
PbS/PbSe Multiple Channel Detectors

Description

Our polychristalline biased (PB) detectors are also available as multi channel devices, mainly duals or quads.

Two or four single elements are combined in a one package and can be supplied with one filter for each channel.

Regarding the filters, we offer two options: customized filters according to customers' specifications or any of the filters from our range of filters for pyroelectric detectors.



Features

- Depending on the detector material used (PB25 up to PB55); the spectral range goes from 1 up to 5.2 μm
- State of the art performance
- 100% test data

Applications

- Non-dispersive infrared gas analysis, for simultaneous measurements of gases

Versions

- TO-can (TO-39 and TO-8)
- Cooled and uncooled versions
- Custom filter designs possible

Specifications

Part number	Number of Channels	Design	Element Size [mm ²]	Package	Aperture Dia.	Cooling
PB50S1010T1S8L-xxxx*	4	quadrant	1.0 x 1.0	TO-8 large cap	9.53 mm	T1S
PB25S10109M-xx*	2	row	1.0 x 1.0	TO-39 medium cap	6.35 mm	-

Other versions are available on request.

*Filter codes (see chapter 'designation')

All relevant specifications for single elements according to the datasheets (like D*, responsivity,...) apply also for the multi channel devices, but of course prior to the attenuation to the filter(s).

Absolute Maximum Ratings

		Min.	Max.
Storage Temperature [°C]	PbS	-70	+80
	PbSe	-70	+95
Operating Temperature [°C]	PbS	-65	+75
	PbSe	-65	+90
Soldering Temperature, 5 sec. [°C]		-	+250 (at pins only)
ESD Damage Threshold, Human Body Model Class 3B ^o , [V]		8000	

° ANSI/ ESD STM5. 1-2007

The TE-Cooler ratings are listed in the datasheets

Part Number Designation

For the designation simply add the filter code (capital letters) to the standard PB designation.

The filter codes can be found in the datasheet: "Pyroelectric Detectors- filter and window selection".

Example:

PB50S1010T1S8L-CDKH:

- PbSe detector
- Element size 1x1 mm² (each channel)
- Cooled (one stage superior)
- TO-8 can with large cap and sapphire window
- Filter channel 1: C for Methane,
Filter channel 2: D for CO₂,
Filter channel 3: K for CO and
Filter channel 4: H as Reference

For customized filter options, the standard designation with an unique customer part number (4 digits) in addition will be used, e.g. PB50S1010T1S8L-D013.

Product Changes

LASER COMPONENTS reserves the right to make changes to the product(s) or information contained herein without notice. No liability is assumed as a result of their use or application.

Ordering Information

Products can be ordered directly from LASER COMPONENTS or its representatives. For a complete listing of representatives, visit our website at www.lasercomponents.com