

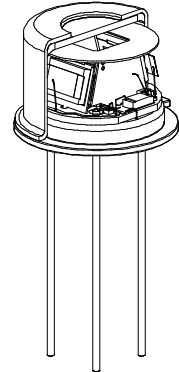
LIM-032-#

Dual channel pyroelectric multicolor detector with integrated beamsplitter (PyroMid®)

Description: LIM-032-#

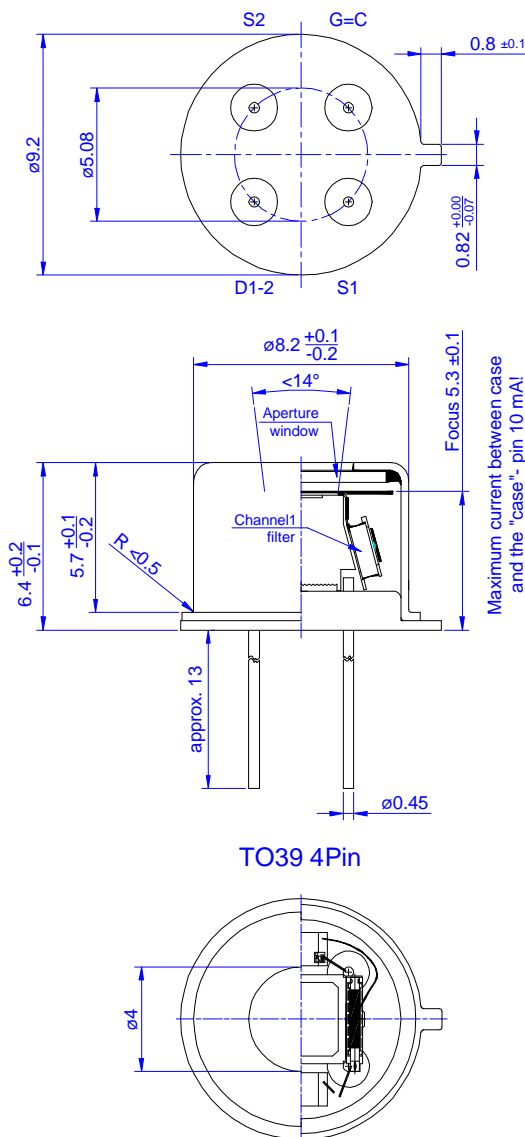
[# = extension code]

dual color, TO39 housing, with integrated micro groove beamsplitter; for voltage mode

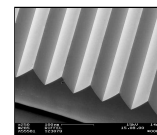
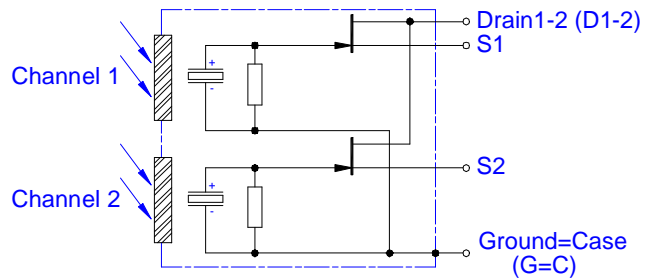


PyroMid® detectors are State-of-the-art, cost effective, multicolor detectors for virtually any infrared application.

Housing:

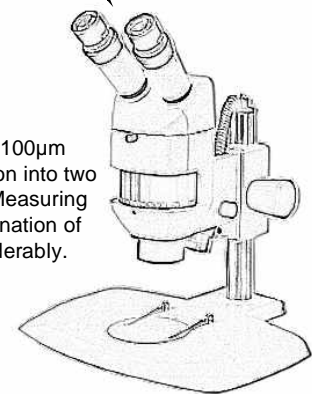


Pin assignment:



SEM photograph of a micro groove beamsplitter

More than 25 micro V-grooves (100µm pitch) divide the incident radiation into two spectral channels (patented). Measuring errors by an asymmetrical illumination of the aperture are reduced considerably.



Multi-color Products

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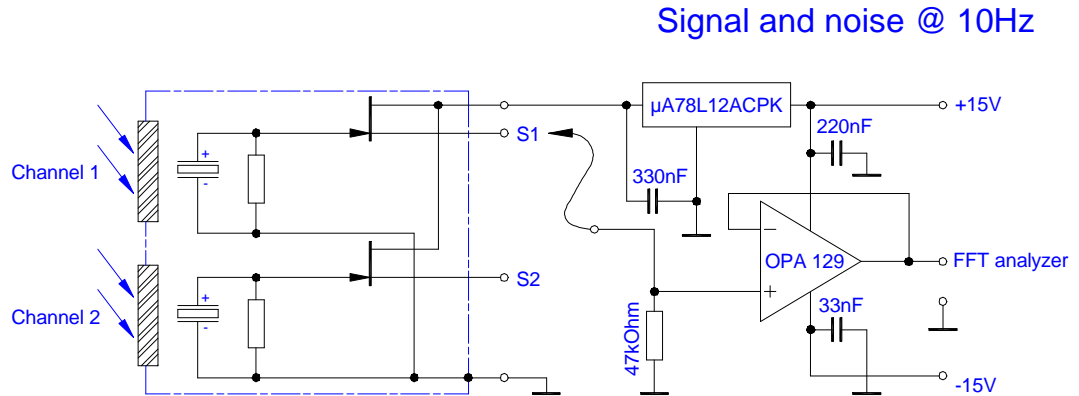


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LIM-032-#

Dual channel pyroelectric multicolor detector
with integrated beamsplitter (PyroMid®)

Test circuit:



Parameters:

Aperture size	nom	2.8 mm sq.
Element size / type	nom	2.2x1.3 mm ² lithium tantalate with black layer
Beamsplitter	nom	array of micro grooves
Thermal time constant	typ	250 ms
Electrical time constant	typ	5 s
Polarity	nom	positive signal by positive IR flux change
Voltage responsivity {500K, 10Hz, 25°C, without window}	min	150 V/W
Noise density {10Hz, BW 1Hz, 25°C}	max	200 nV/Hz ^{1/2}
Detectivity {500K, 10Hz, 1Hz, 25°C, without window}	min	2.1*10 ⁸ cmHz ^{1/2} /W
Offset voltage {I _{Dopt.} =10-100μA}	nom	0.4 ... 1.5 V
U _{DS}	max	18 V
Operating / Storage temperature	nom	-25 ... +85°C
Aperture window		CaF ₂ 0.4mm thick, customized window upon request.
Channel filters		Combinations of all InfraTec standard narrow band pass filters are available. Customized filters upon request.

InfraTec reserves the right to change these specifications at any time without notification!

© InfraTec GmbH, October 18th 2005

InfraTec GmbH

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