

PYROELECTRIC DUAL ELEMENT DETECTORS FOR MOTION SENSING

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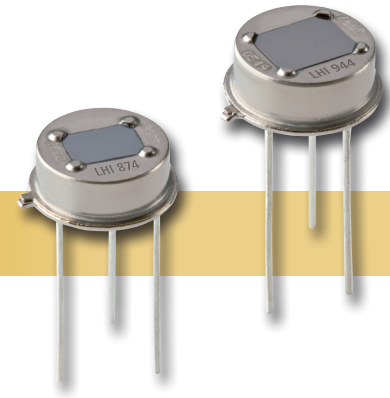
LHi 874, LHi 944 – Low Profile Pyro

Applications

- Auto light switch
- Wall switch
- Auto lamps with 180° FOV using 2 detectors

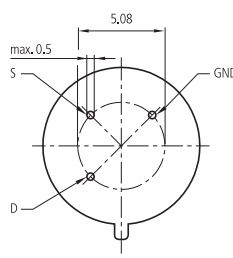
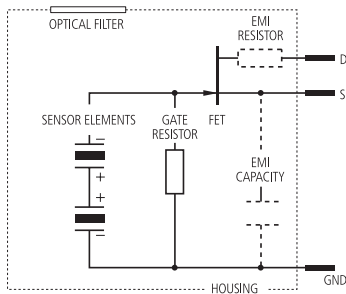
Features and Benefits

- TO-39 metal housing
- Different window sizes
- EMI protection option

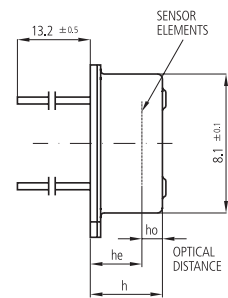
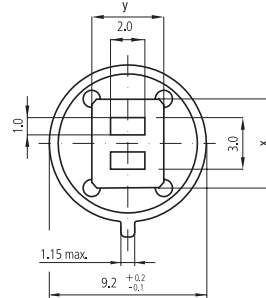


Product Description

These low profile TO-39 detectors are very well suited with two detectors arranged in one common sensing unit for up to 180 degree view, with an EMI protection in LHi 944.



All dimensions in mm



LHi 874, LHi 944 – Low Profile Pyro

Parameter	Symbol	LHi 874	LHi 944	Unit	Remark
Responsivity, min.	R_{min}	3.3	3.3	kV/W	$f = 1 \text{ Hz}$
Responsivity, typ.	R_{typ}	4.2	4.2	kV/W	$f = 1 \text{ Hz}$
Match, max.	M_{max}	10	10	%	
Noise, max.	N_{max}	50	50	μV_{pp}	0.4...10 Hz / 20° C
Noise, typ.	N_{typ}	20	20	μV_{pp}	0.4...10 Hz / 20° C
Spec. detectivity	D^*	20	20	$10^7 \text{ cm}^2/\text{Hz/W}$	1 Hz / 1 Hz BW / 20° C
Field of view, horizontal	FoV	95°	110°		Unobstructed
Field of view, vertical	FoV	87°	110°		Unobstructed
Source voltage		0.2-1.55	0.2-1.55	V	47 k Ω / 20° C / 5 V
Operating voltage		2.0 ... 12	2.0 ... 12	V	47 k Ω / 20° C
EMI performance		**	**		
WLI		*	*		Excelitas tester
Height	h	3.2	3.2	mm	
Optical element location	he / ho	2.2 / 0.75	2.2 / 0.75	mm	
Filter size	X / Y	4.6 / 3.4	5.2 / 4.2	mm	

* Improved, ** Excellent