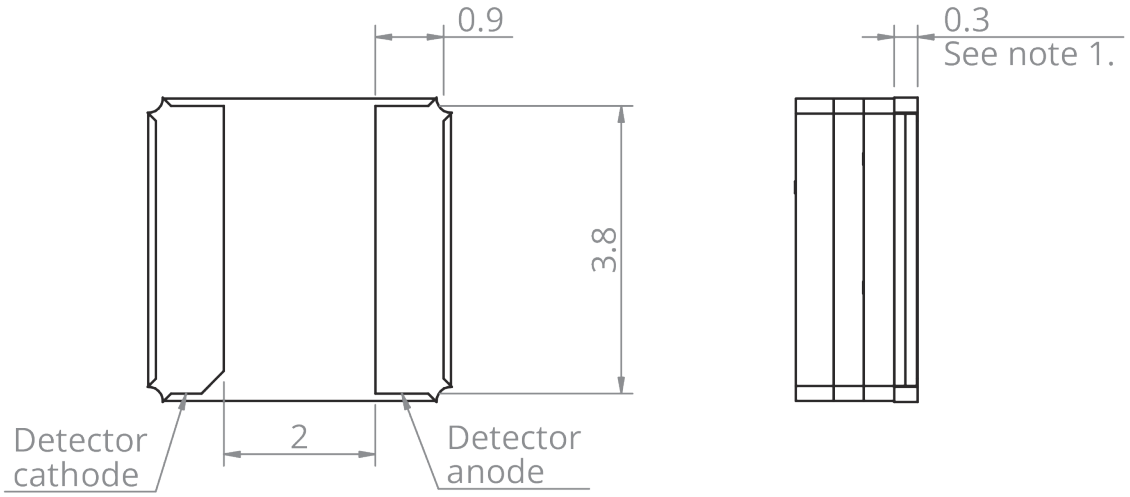
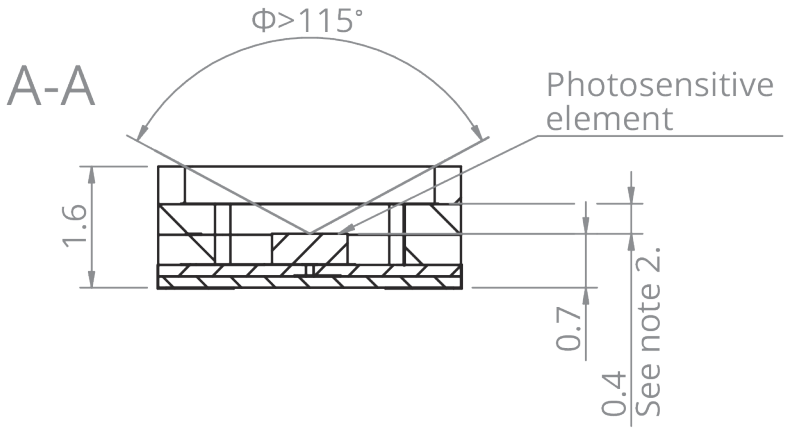
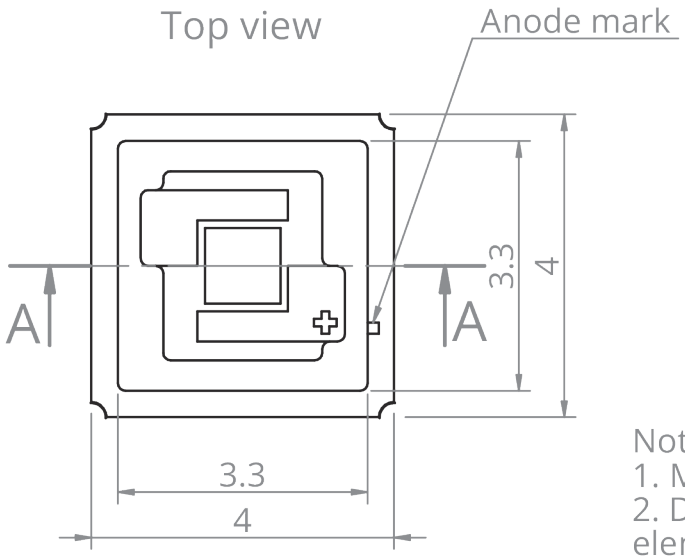
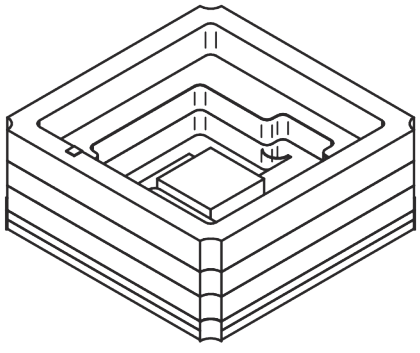
Bottom view





Top view





Notes:
1. Metallization height, only in the corners
2. Distance between the photosensitive element and the window

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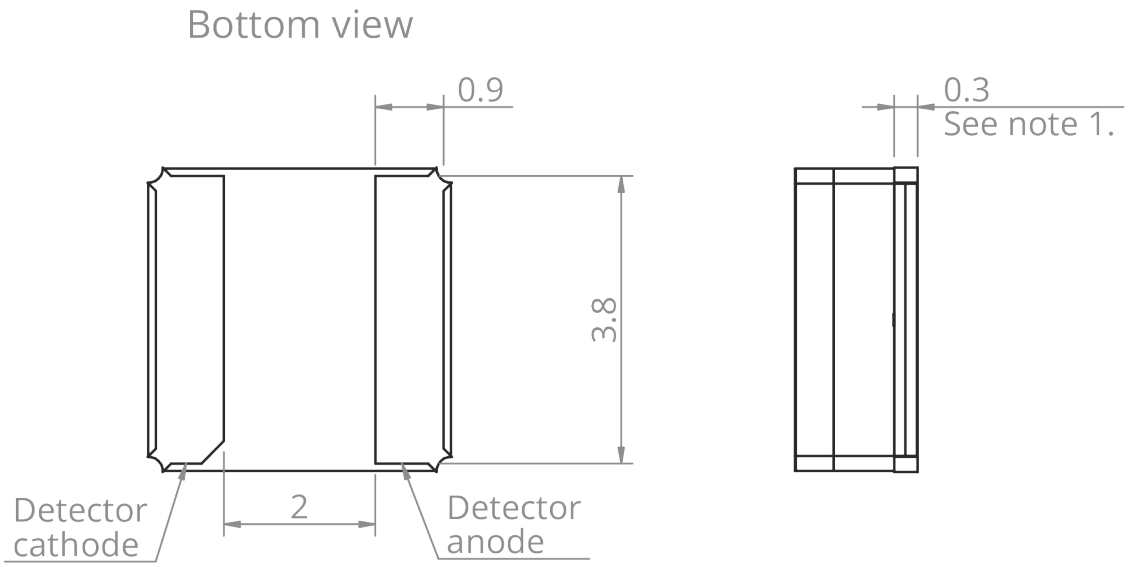
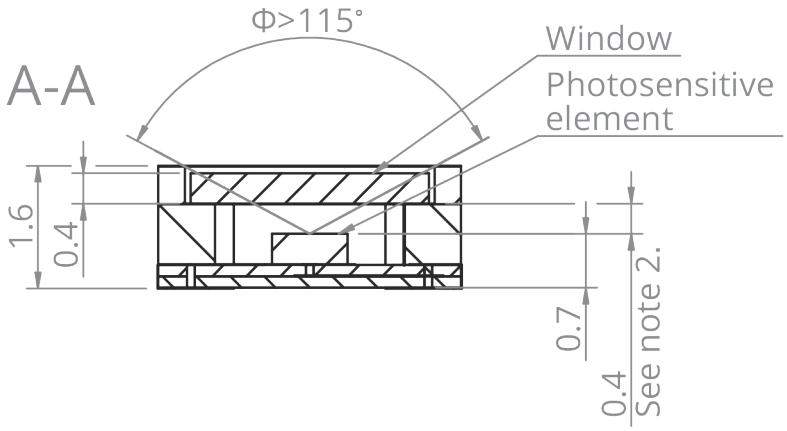
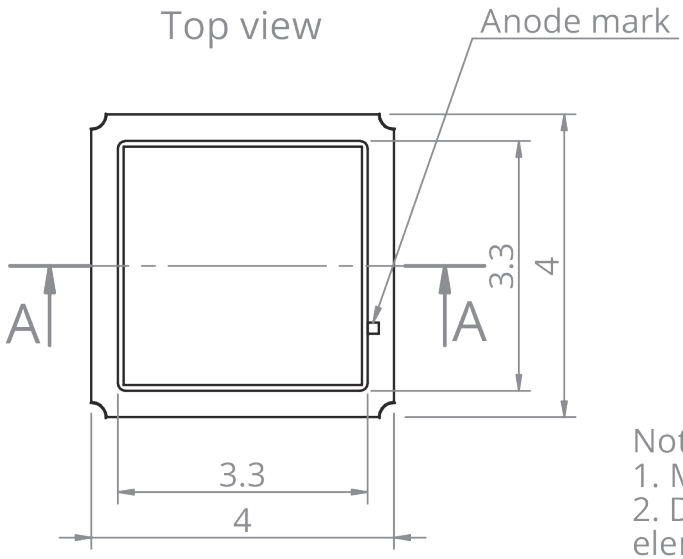
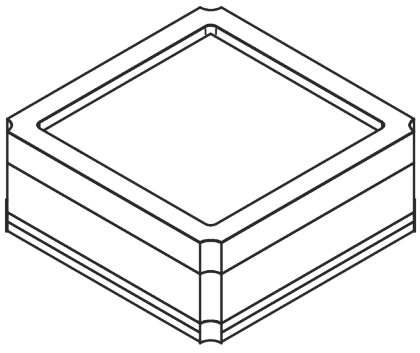
Drawing No.	Rev.	Title
ZTM-SMD-Z171.14	1	Detector SMD - no immersion v2









Notes:
1. Metallization height, only in the corners
2. Distance between the photosensitive element and the window

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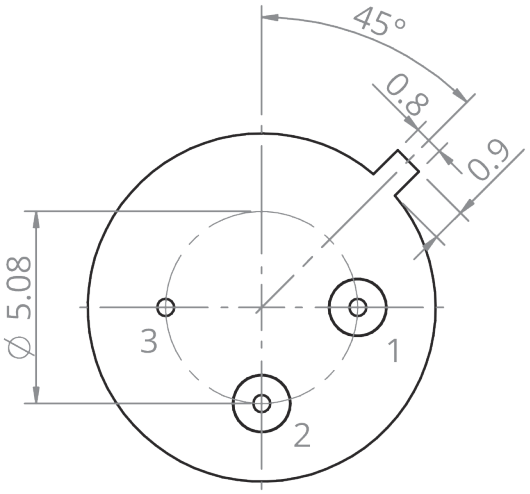
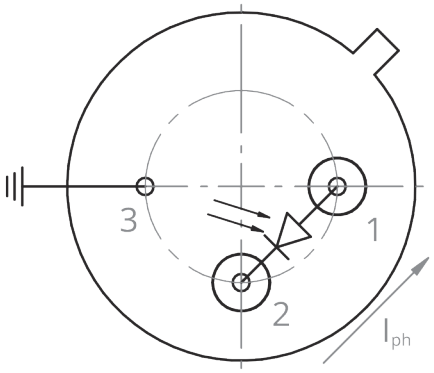
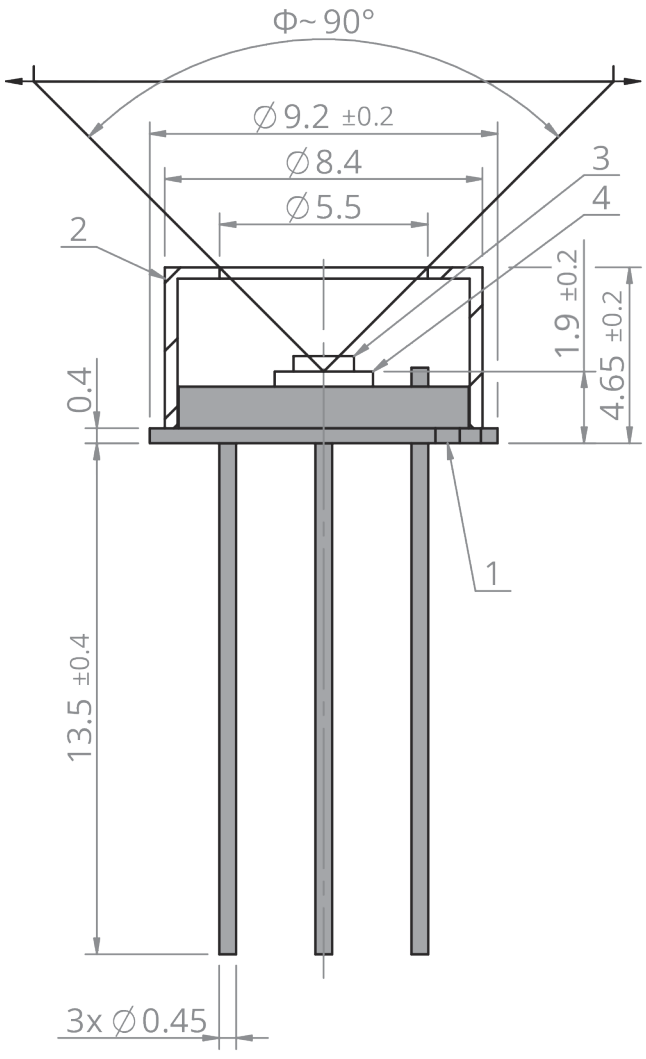
Drawing No.	Rev.	Title
ZTM-SMD-Z171.1	2	Detector SMD - no immersion

Bottom view

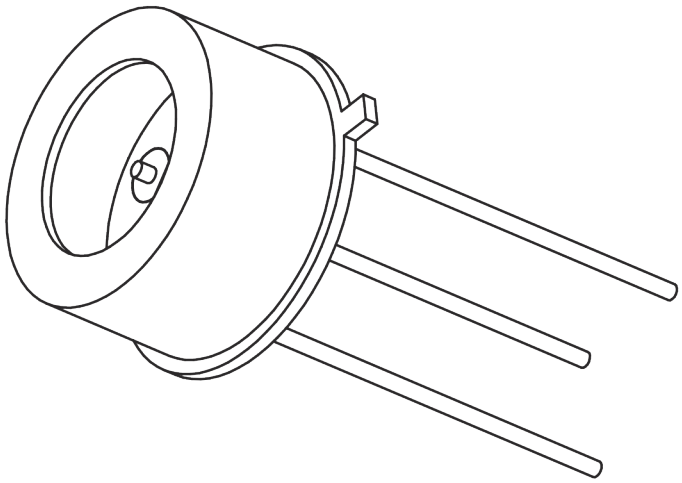


Bottom view
Photovoltaic





Pinout	
Pin No.	Connection
1	Detector anode
2	Detector cathode
3	Chassis ground

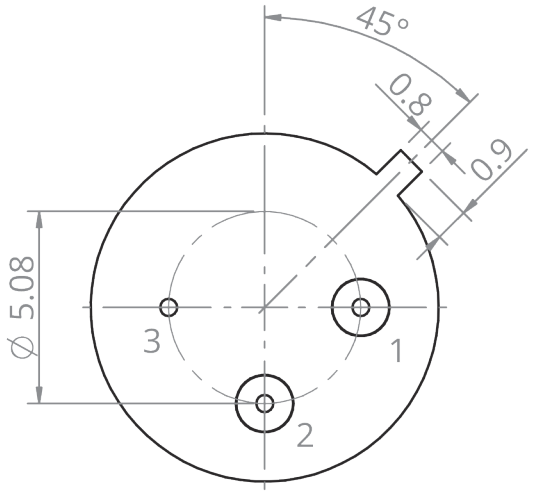


No.	Name	Material
4	Detector carrier	Sapphire/Silicon
3	Detector	HgCdTe/InAs/InAsSb/GaAs
2	Detector cap	Brass
1	TO39 header	Gold plated Kovar

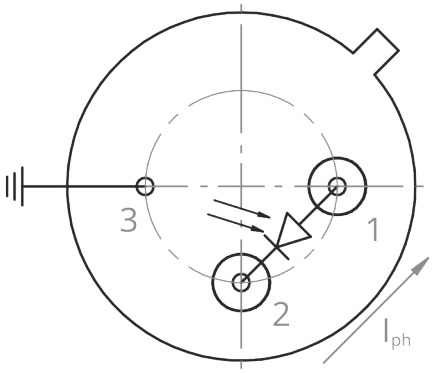
FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	

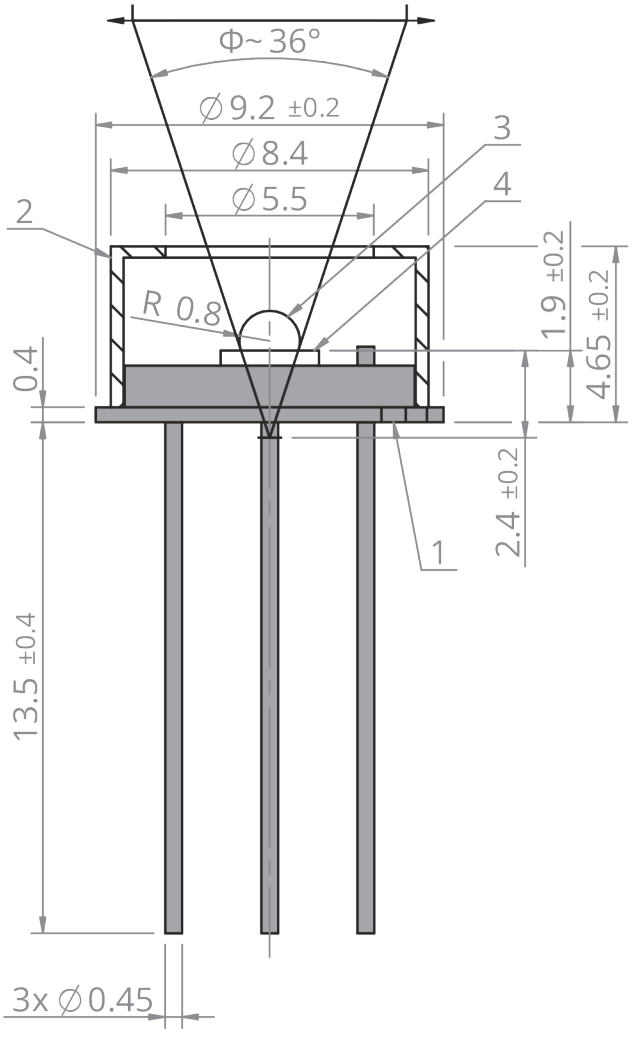
Drawing No.	Rev.	Title
ZTM-TO39-Z002	7	Detector TO39 - no immersion

Bottom view

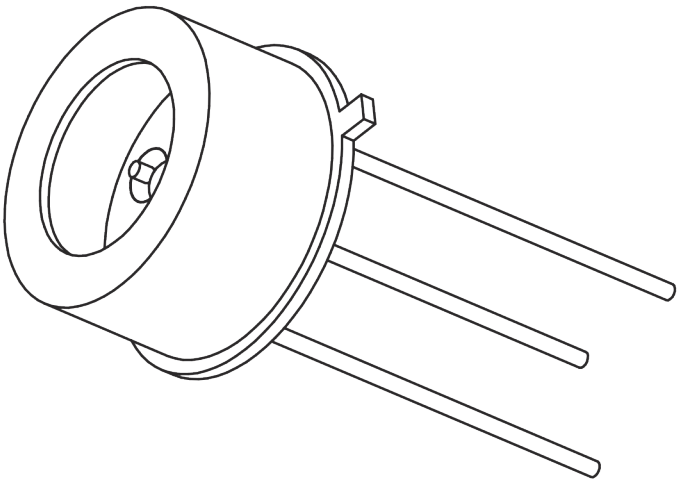


Bottom view
Photovoltaic





Pinout	
Pin No.	Connection
1	Detector anode
2	Detector cathode
3	Chassis ground

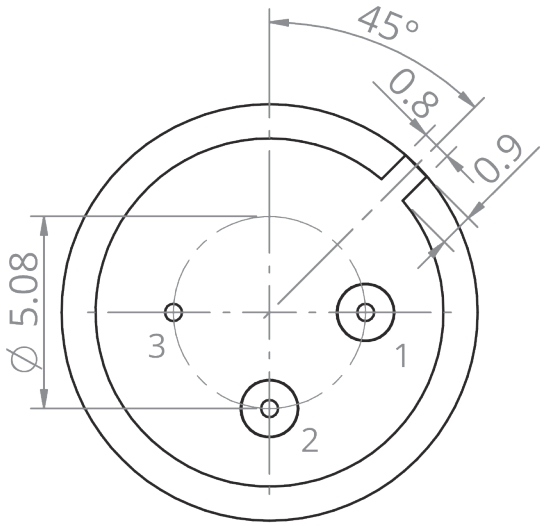


No.	Name	Material
4	Detector carrier	Sapphire/Silicon
3	Detector	HgCdTe/InAs/InAsSb/GaAs
2	Detector cap	Brass
1	TO39 header	Gold plated Kovar

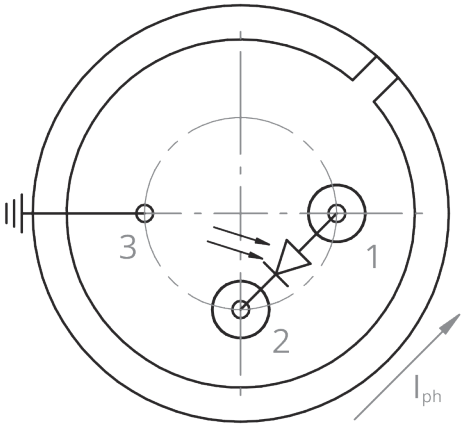
FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	

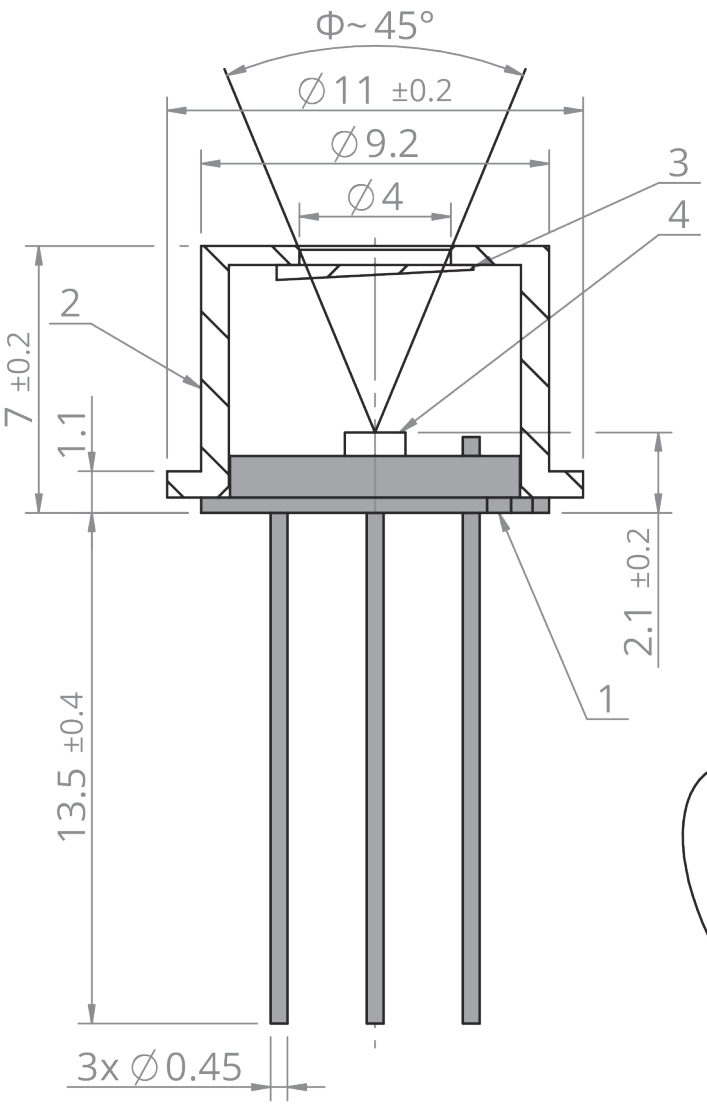
Drawing No.	Rev.	Title
ZTM-TO39-Z001	8	Detector TO39 - immersion

Bottom view

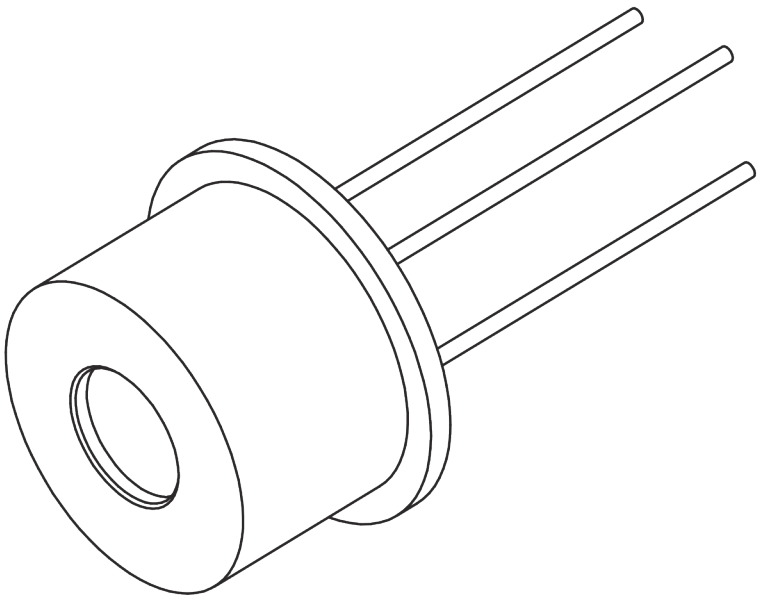


Bottom view
Photovoltaic





Pinout	
Pin No.	Connection
1	Detector anode
2	Detector cathode
3	Ground

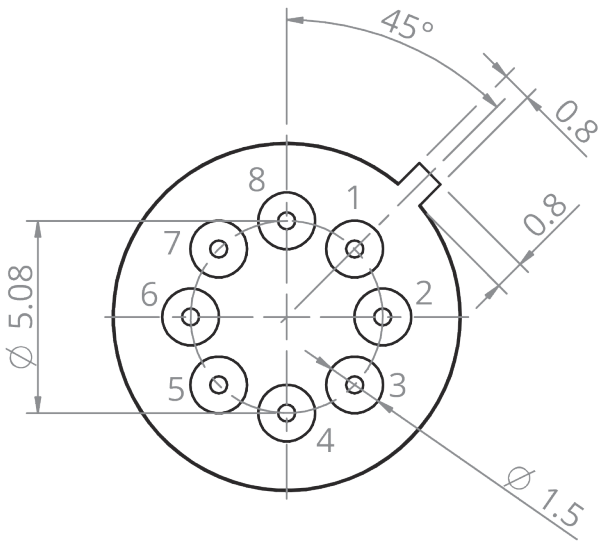


No.	Name	Material
4	Detector	InP/InGaAs
3	Window	Al2O3
2	Detector cap	Stainless Steel
1	TO39 header	Gold plated Kovar

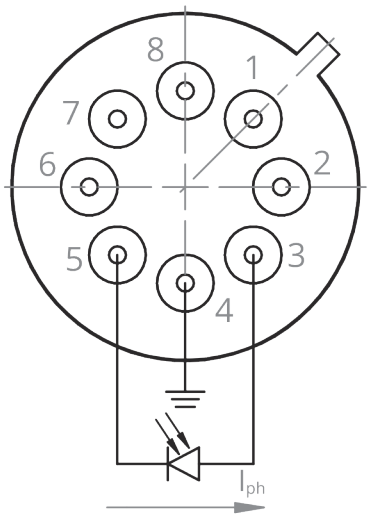
FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale	Sheet	Size	This document is the property of VIGO Photonics S.A. and may not be disclosed to third parties, copied or used in whole or in part for any purpose without written permission from VIGO Photonics S.A.
		5:1	1/1	A4	

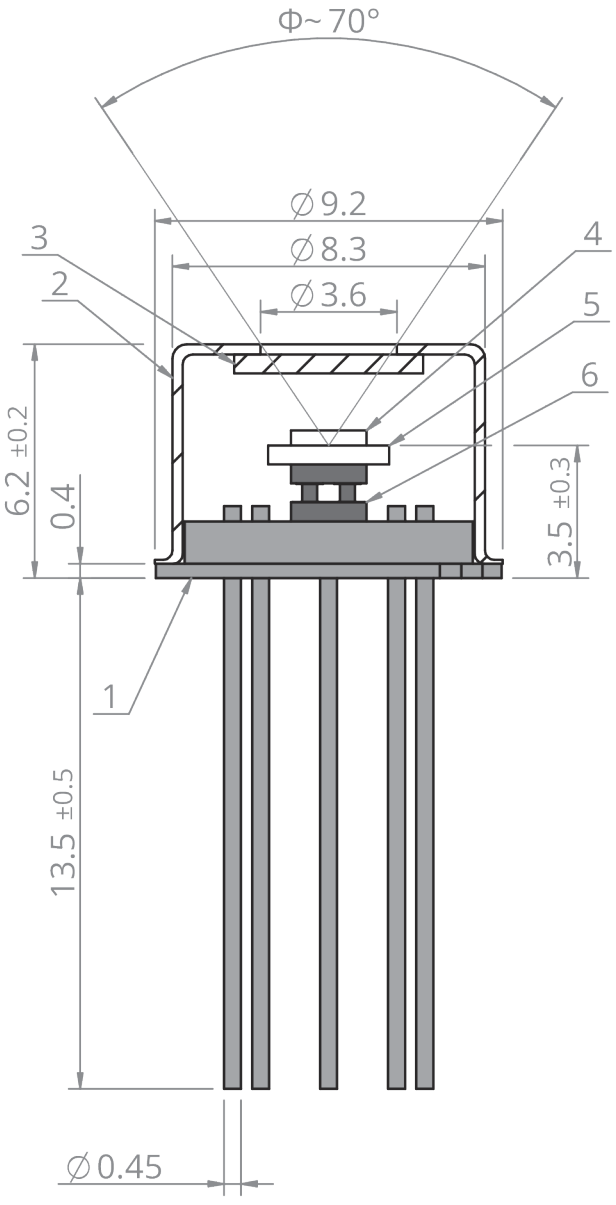
Drawing No.	Rev.	Title
ZTM-TO39-Z228.1	1	Detector TO39 v2 - no immersion

Bottom view

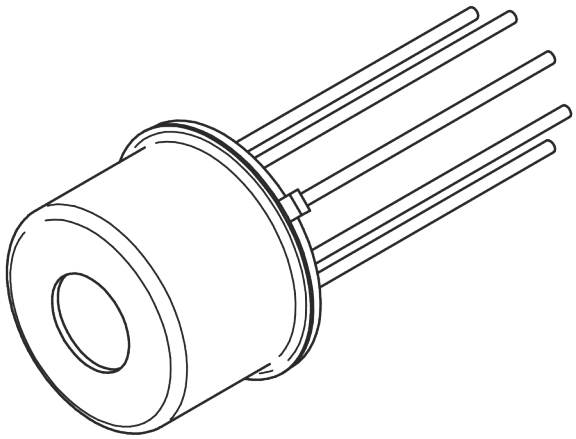


Bottom view
Photovoltaic





Pinout	
Pin No.	Connection
1	TE cooler (+)
2	Not used
3	Detector anode (+)
4	Ground
5	Detector cathode (-)
6	Thermistor Pin 1
7	TE cooler (-)
8	Thermistor Pin 2

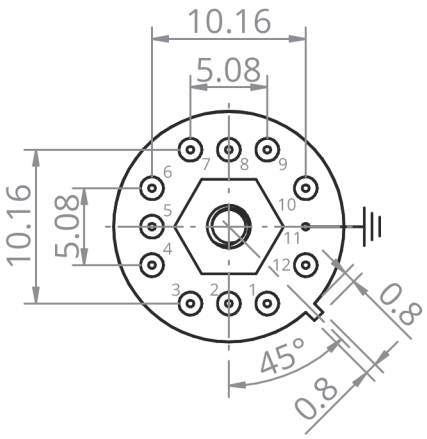


No.	Name	Material
6	Thermoelectric cooler	
5	Detector carrier	Silicon
4	Detector	InAs/InAsSb/GaAs
3	Window	Si AR
2	Detector cap	Kovar
1	TO39 header	Gold plated Steel

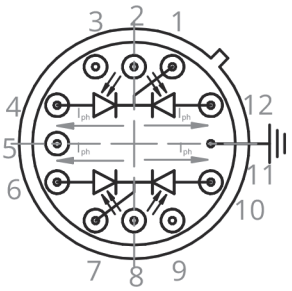
FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	This document is the property of VIGO Photonics S.A. and may not be disclosed to third parties, copied or used in whole or in part for any purpose without written permission from VIGO Photonics S.A.

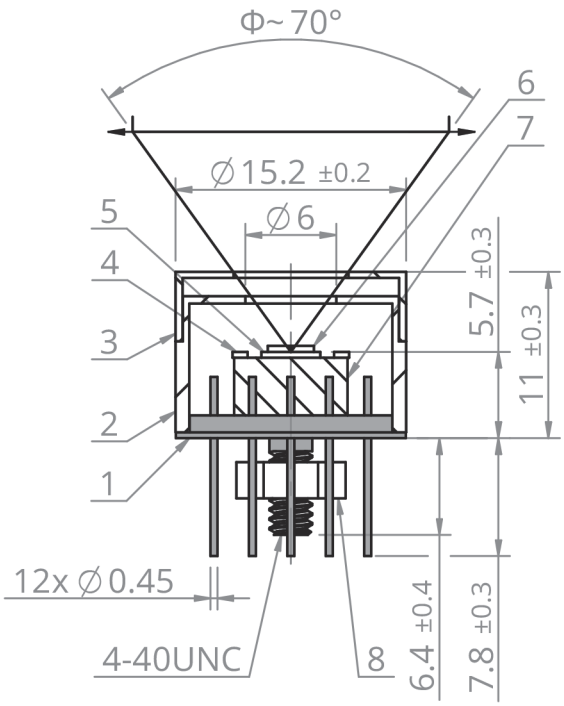
Drawing No.	Rev.	Title
ZTM-TO39_8-Z001	4	Detector TO39 8 pin - no immersion

Bottom view

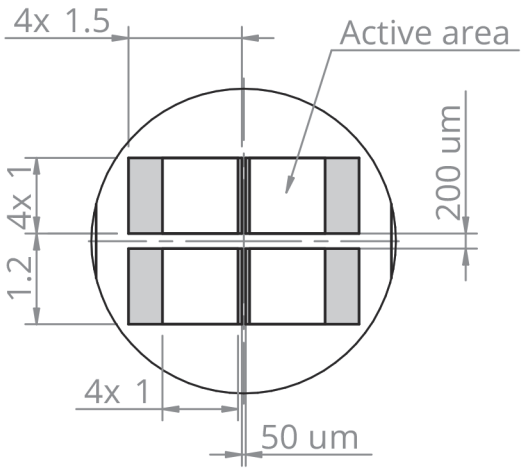


Top view
Photovoltaic

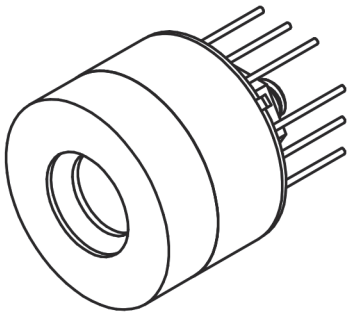




Top view
Photovoltaic



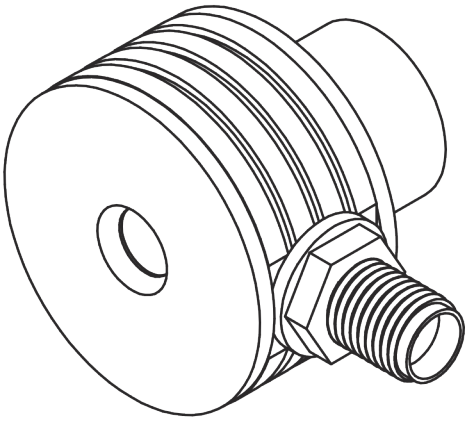
Pinout	
Pin No.	Connection
1	Detectors 1 and 4 cathode
2	Not used
3	Not used
4	Detector 4 anode
5	Not used
6	Detector 3 anode
7	Detectors 2 and 3 cathode
8	Not used
9	Not used
10	Detector 2 anode
11	Chassis ground
12	Detector 1 anode

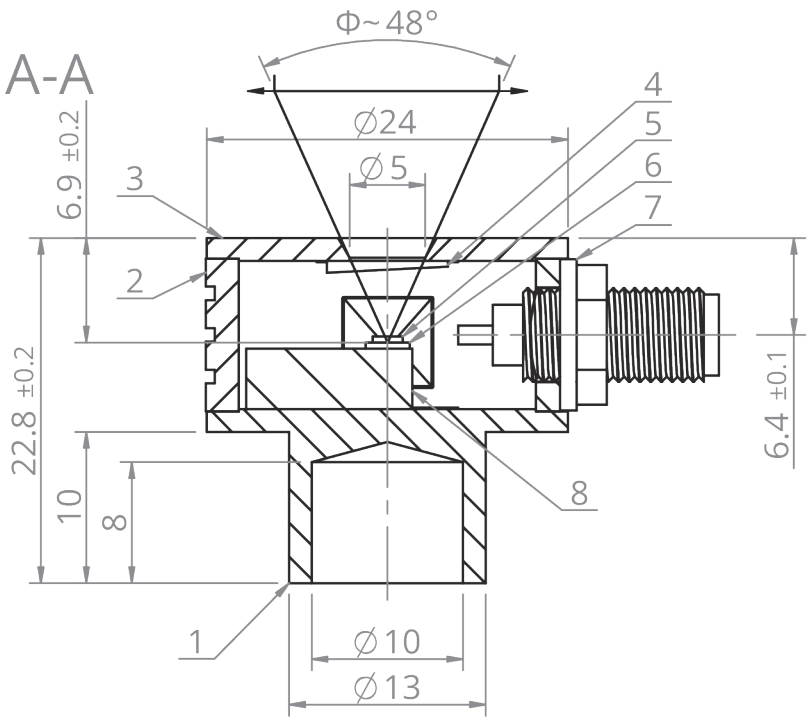


No.	Name	Material
8	4-40 UNC A2 nut	Stainless steel
7	Distance barrel	MO58
6	Detector	HgCdTe/GaAs
5	Detector carrier	Sapphire/Silicon
4	Pad	Sapphire
3	Detector cap	Stainless steel
2	Detector case	Stainless steel
1	TO8 header	Gold plated Kovar

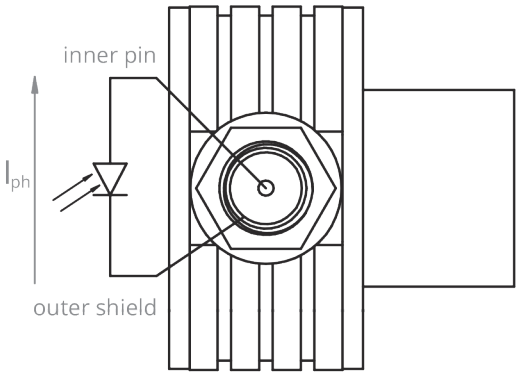
FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	

Drawing No.	Rev.	Title
ZTM-TO8Quad-Z001	10	Detector TO8 - Quadrant Photovoltaic

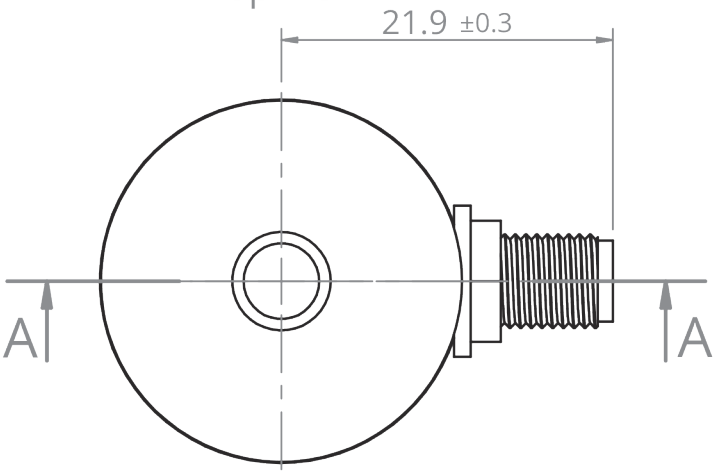




Side view
Photovoltaic



Top view



Output signal	
Inner pin	Detector anode
Outer shield	Detector cathode

No.	Name	Material
8	Mounting pad	Brass
7	SMA connector	
6	Detector carrier	Silicon
5	Detector	HgCdTe/GaAs
4	Window	ZnSe AR
3	PEM lid	Black anodized aluminium
2	Detector case	Black anodized steel
1	PEM handle	Black anodized aluminium

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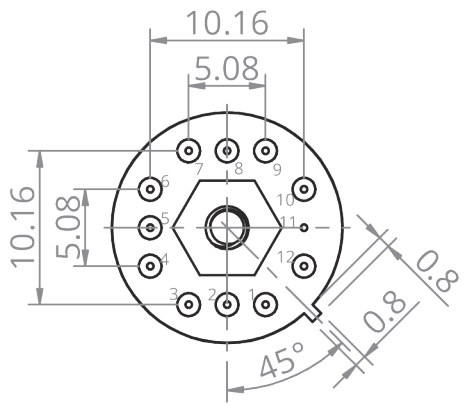
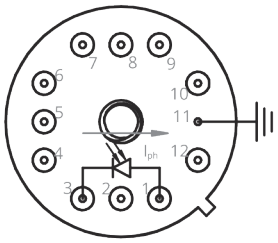
Drawing No.	Rev.	Title
ZTM-PEM-Z002	5	Detector PEM SMA - no immersion

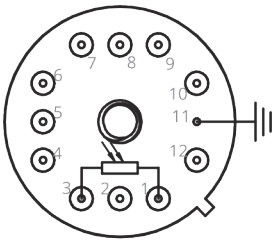
Bottom view

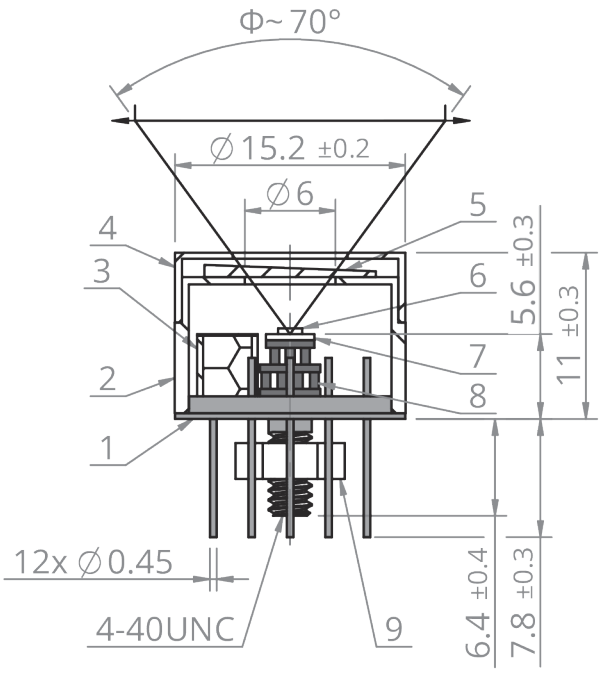


Bottom view
Photovoltaic

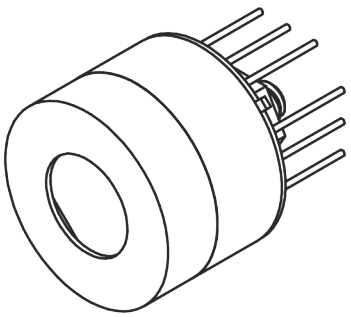


Bottom view
Photoconductive





Pinout		
Pin No.	Connection	
	Photovoltaic	Photoconductive
1	Detector anode	Detector
2	TE cooler (+)	TE cooler (+)
3	Detector cathode	Detector
4	Not used	Not used
5	Not used	Not used
6	Not used	Not used
7	Thermistor	Thermistor
8	TE cooler (-)	TE cooler (-)
9	Thermistor	Thermistor
10	Not used	Not used
11	Chassis ground	Chassis ground
12	Not used	Not used

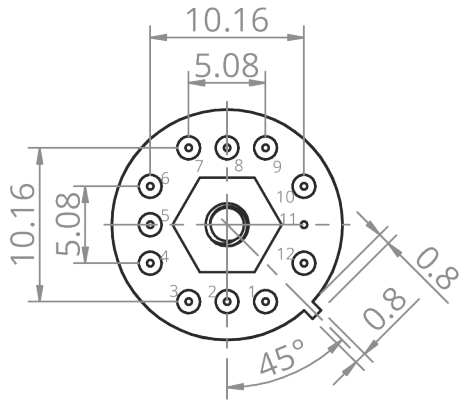


No.	Name	Material
9	4-40 UNC A2 nut	Stainless steel
8	Thermoelectric cooler	
7	Detector carrier	Sapphire/Silicon
6	Detector	HgCdTe/InAs/InAsSb/GaAs
5	Window	Al2O3/ZnSe AR
4	Detector cap	Stainless steel
3	Humidity absorber container	Stainless steel
2	Detector case	Stainless steel
1	TO8 header	Gold plated Kovar

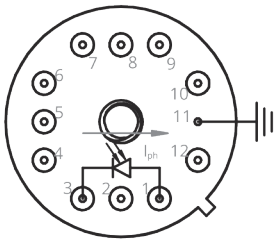
FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	

Drawing No.	Rev.	Title
ZTM-TO8-Z021	8	Detector TO8 2TE - no immersion

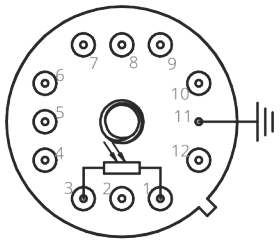
Bottom view



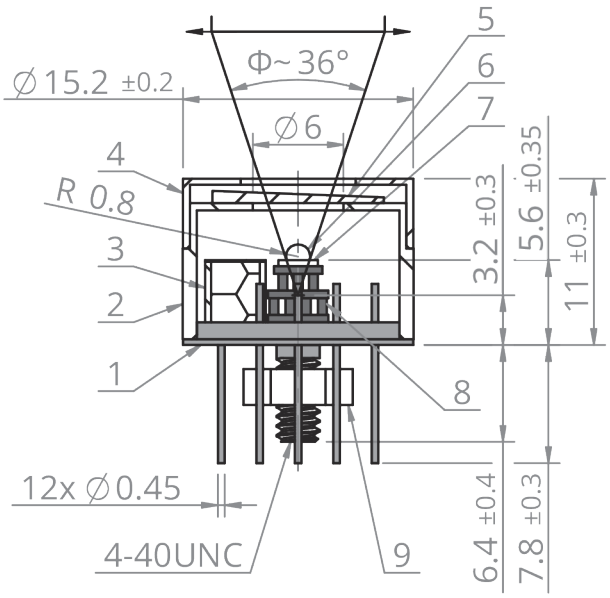
Bottom view
Photovoltaic

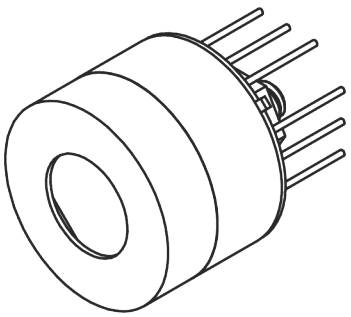


Bottom view
Photoconductive



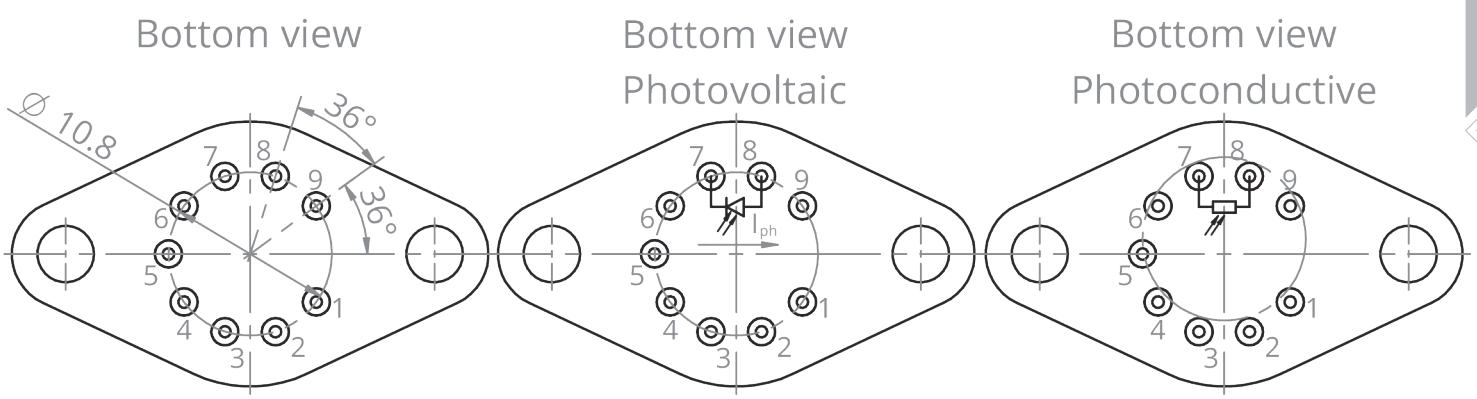
Pinout		
Pin No.	Connection	
	Photovoltaic	Photoconductive
1	Detector anode	Detector
2	TE cooler (+)	TE cooler (+)
3	Detector cathode	Detector
4	Not used	Not used
5	Not used	Not used
6	Not used	Not used
7	Thermistor	Thermistor
8	TE cooler (-)	TE cooler (-)
9	Thermistor	Thermistor
10	Not used	Not used
11	Chassis ground	Chassis ground
12	Not used	Not used

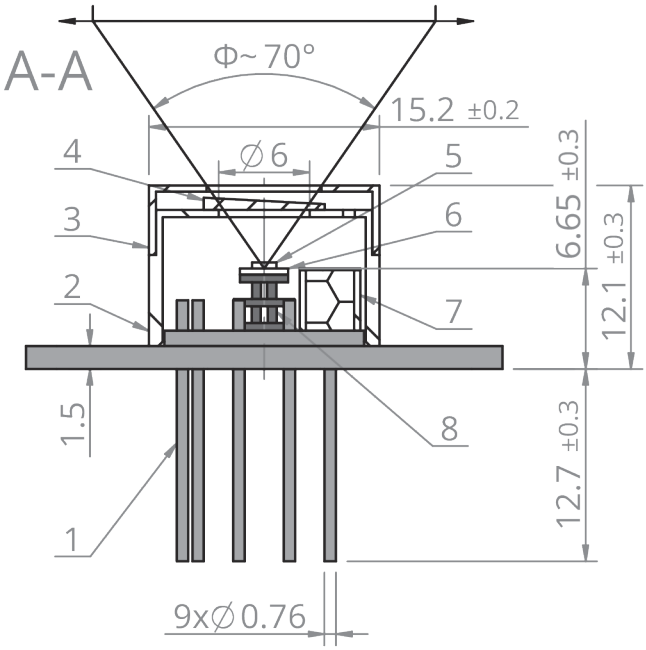




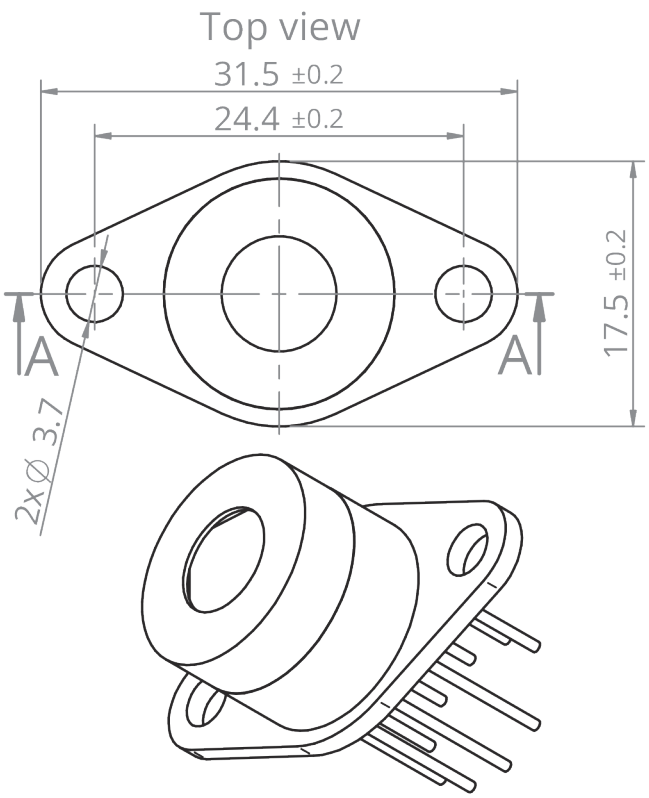
No.	Name	Material
9	4-40 UNC A2 nut	Stainless steel
8	Thermoelectric cooler	
7	Detector carrier	Sapphire/Silicon
6	Detector	HgCdTe/InAs/InAsSb/GaAs
5	Window	Al2O3/ZnSe AR
4	Detector cap	Stainless steel
3	Humidity absorber container	Stainless steel
2	Detector case	Stainless steel
1	TO8 header	Gold plated Kovar

FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	This document is the property of VIGO Photonics S.A. and may not be disclosed to third parties, copied or used in whole or in part for any purpose without written permission from VIGO Photonics S.A.
	Drawing No. ZTM-TO8-Z020		Rev. 8	Title Detector TO8 2TE - immersion	



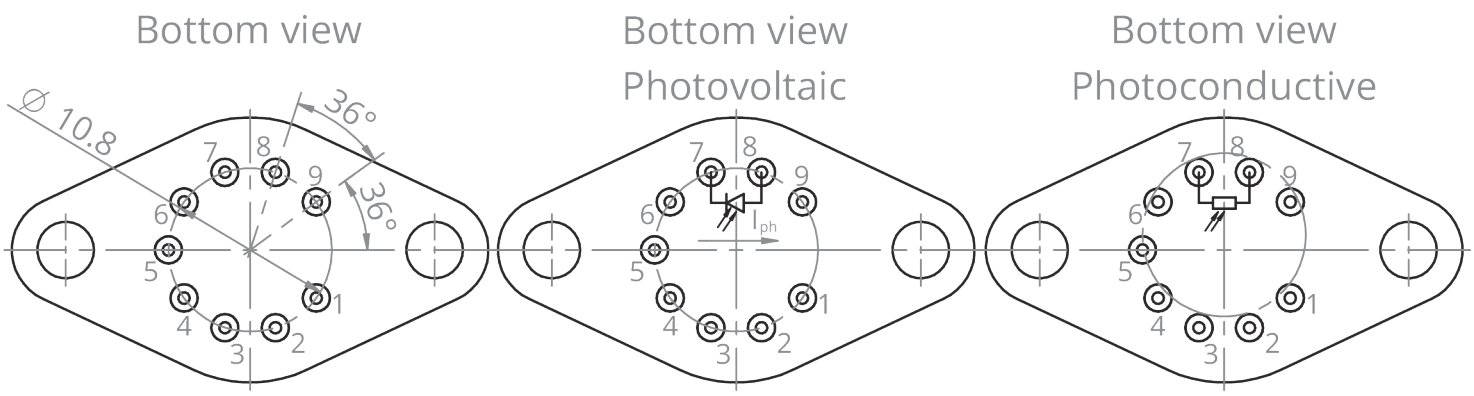


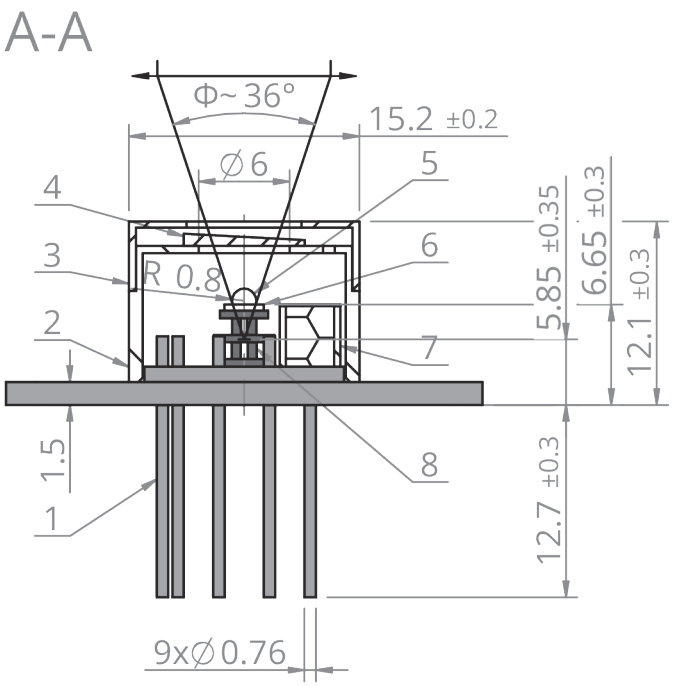
Pinout		
Pin No.	Connection	
	Photovoltaic	Photoconductive
1	TE cooler (+)	TE cooler (+)
2	Not used	Not used
3	Not used	Not used
4	Not used	Not used
5	Thermistor	Thermistor
6	Thermistor	Thermistor
7	Detector cathode	Detector
8	Detector anode	Detector
9	TE cooler (-)	TE cooler (-)



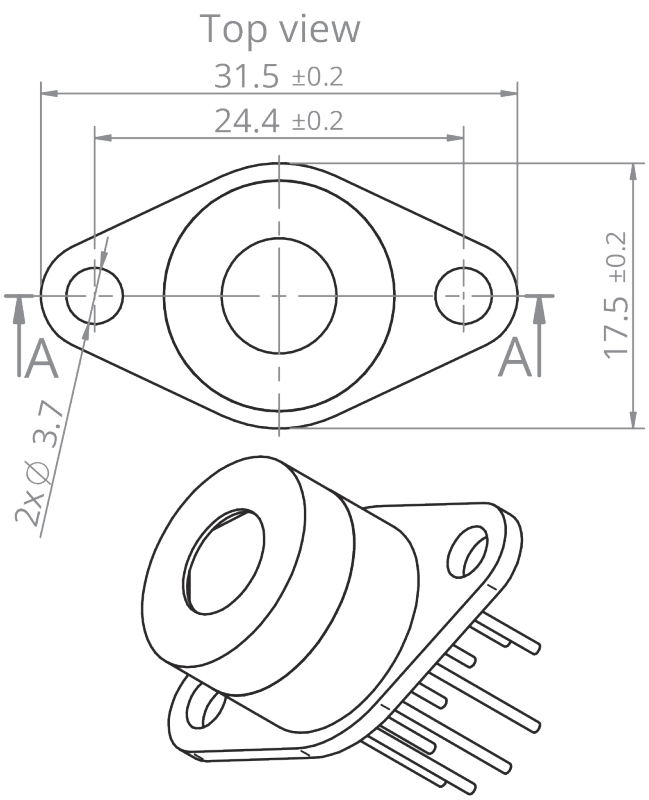
No.	Name	Material
8	Thermoeletric cooler	
7	Humidity absorber container	Stainless steel
6	Detector carrier	Sapphire/Silicon
5	Detector	HgCdTe/InAs/InAsSb/GaAs
4	Window	Al2O3/ZnSe AR
3	Detector cap	Stainless steel
2	Detector case	Stainless steel
1	TO66 header	Gold plated Kovar

FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	This document is the property of VIGO Photonics S.A. and may not be disclosed to third parties, copied or used in whole or in part for any purpose without written permission from VIGO Photonics S.A.
	Drawing No. ZTM-TO66-Z041		Rev. 7	Title Detector TO66 2TE - no immersion	





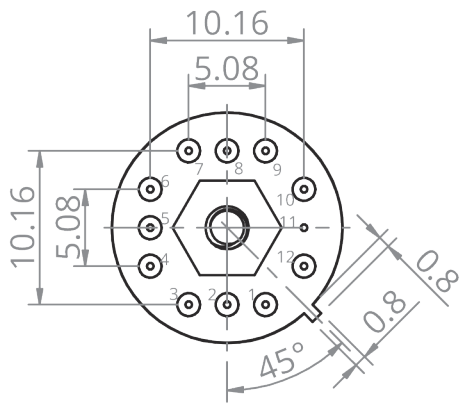
Pinout		
Pin No.	Connection	
	Photovoltaic	Photoconductive
1	TE cooler (+)	TE cooler (+)
2	Not used	Not used
3	Not used	Not used
4	Not used	Not used
5	Thermistor	Thermistor
6	Thermistor	Thermistor
7	Detector cathode	Detector
8	Detector anode	Detector
9	TE cooler (-)	TE cooler (-)



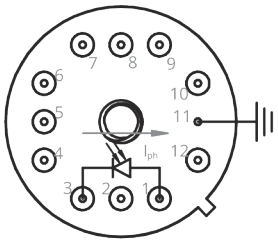
No.	Name	Material
8	Thermoeletric cooler	
7	Humidity absorber container	Stainless steel
6	Detector carrier	Sapphire/Silicon
5	Detector	HgCdTe/InAs/InAsSb/GaAs
4	Window	Al2O3/ZnSe AR
3	Detector cap	Stainless steel
2	Detector case	Stainless steel
1	TO66 header	Gold plated Kovar

FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	This document is the property of VIGO Photonics S.A. and may not be disclosed to third parties, copied or used in whole or in part for any purpose without written permission from VIGO Photonics S.A.
	Drawing No. ZTM-TO66-Z020		Rev. 9	Title Detector TO66 2TE - immersion	

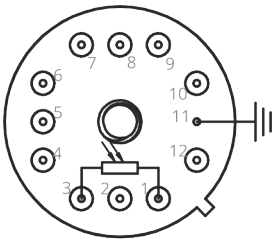
Bottom view

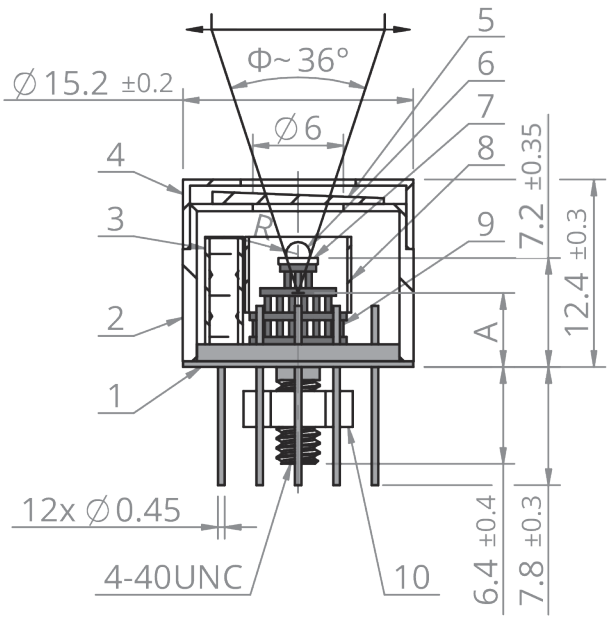


Bottom view
Photovoltaic



Bottom view
Photoconductive

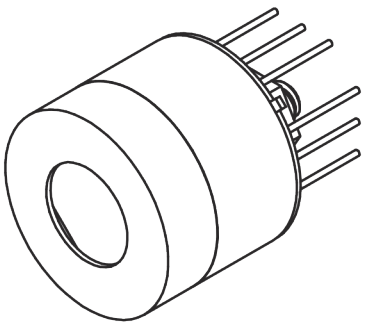




Pinout		
Pin No.	Connection	
	Photovoltaic	Photoconductive
1	Detector anode	Detector
2	TE cooler (+)	TE cooler (+)
3	Detector cathode	Detector
4	Not used	Not used
5	Not used	Not used
6	Not used	Not used
7	Thermistor	Thermistor
8	TE cooler (-)	TE cooler (-)
9	Thermistor	Thermistor
10	Not used	Not used
11	Chassis ground	Chassis ground
12	Not used	Not used

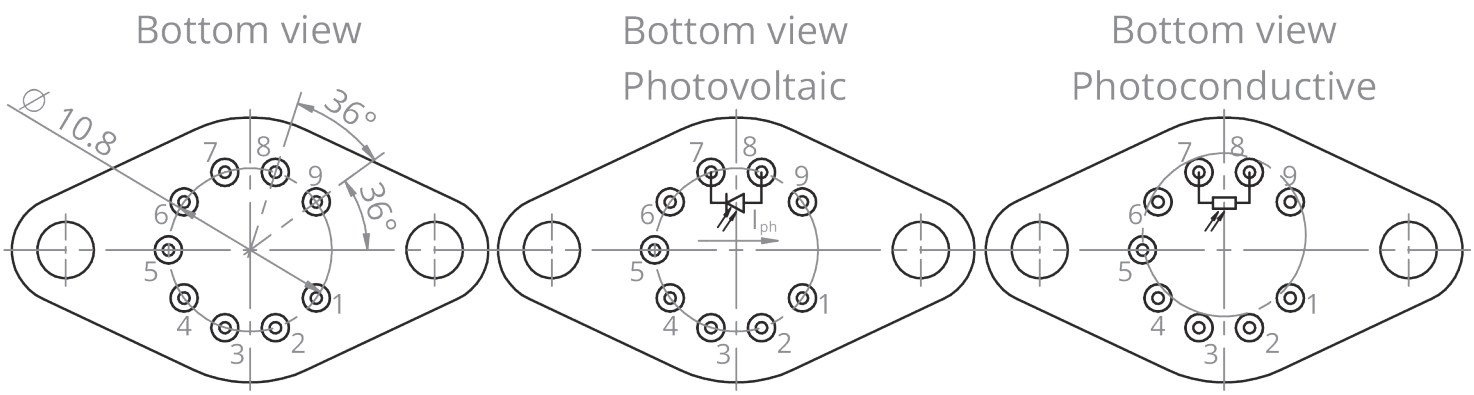
Immersion lens shape	Hyperhemisphere	
Detector optical area [mm²]	0.5x0.5	1x1
R [mm]	0.5	0.8
A [mm]	5.70±0.35	4.80±0.35

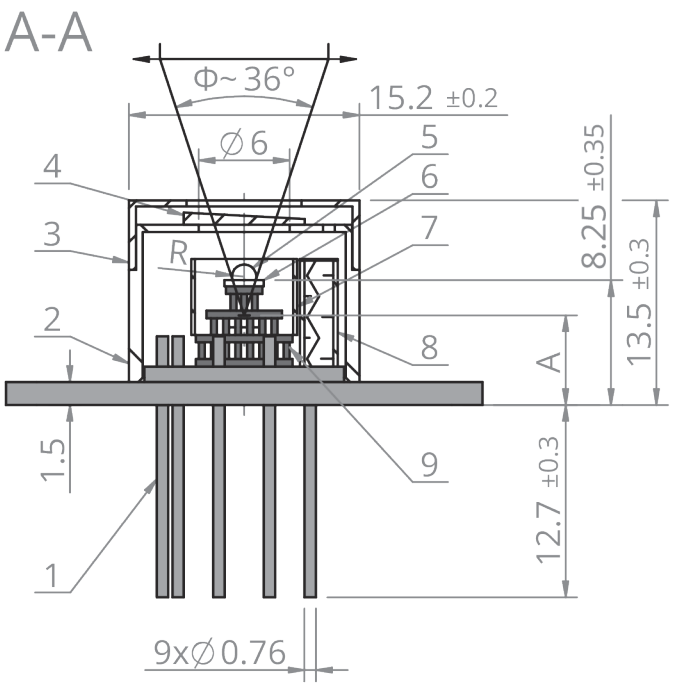
A - Distance from the bottom of the TO8 header to the focal plane



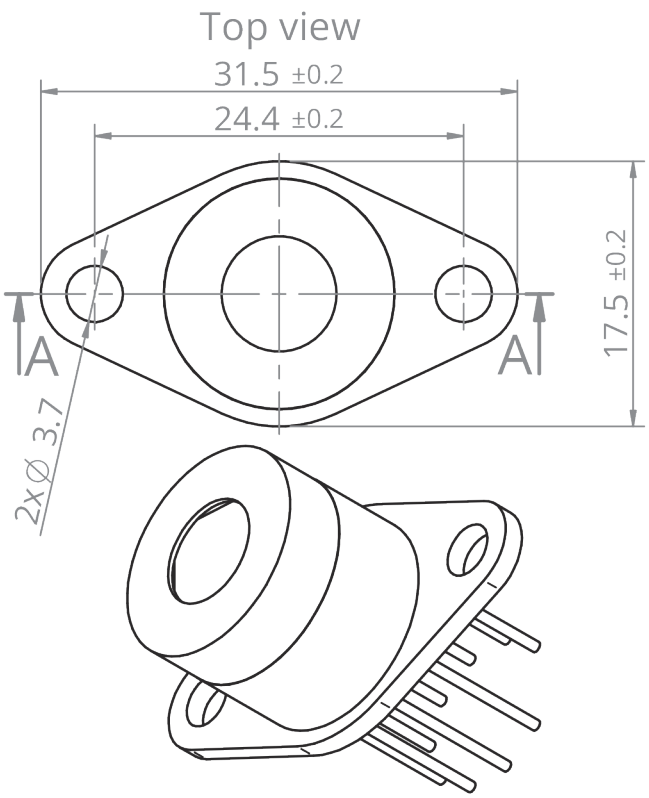
No.	Name	Material
10	4-40 UNC A2 nut	Stainless steel
9	Thermoelectric cooler	
8	Anticonvection shield	POM
7	Detector carrier	Sapphire/Silicon
6	Detector	HgCdTe/InAs/InAsSb/GaAs
5	Window	Al2O3/ZnSe AR
4	Detector cap	Stainless steel
3	Humidity absorber container	Stainless steel
2	Detector case	Stainless steel
1	TO8 header	Gold plated Kovar

FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 2:1	Sheet 1/1	Size A4	This document is the property of VIGO Photonics S.A. and may not be disclosed to third parties, copied or used in whole or in part for any purpose without written permission from VIGO Photonics S.A.
	Drawing No. ZTM-TO8-Z030		Rev. 8	Title Detector TO8 3TE - immersion	





Pinout		
Pin No.	Connection	
	Photovoltaic	Photoconductive
1	TE cooler (+)	TE cooler (+)
2	Not used	Not used
3	Not used	Not used
4	Not used	Not used
5	Thermistor	Thermistor
6	Thermistor	Thermistor
7	Detector cathode	Detector
8	Detector anode	Detector
9	TE cooler (-)	TE cooler (-)



Immersion lens shape	Hyperhemisphere	
Detector optical area [mm^2]	0.5x0.5	1x1
R [mm]	0.5	0.8
A [mm]	6.75±0.35	5.85±0.35

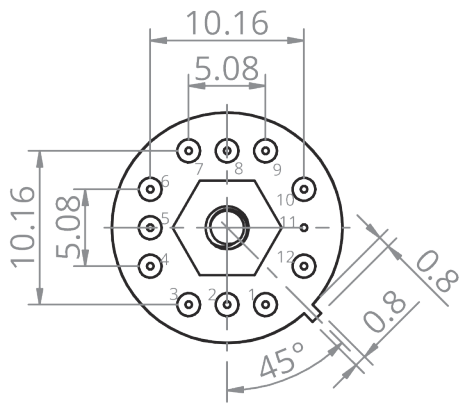
A - Distance from the bottom of the TO66 header to the focal plane

No.	Name	Material
9	Thermoeletric cooler	
8	Humidity absorber container	Stainless steel
7	Anticonvection shield	POM
6	Detector carrier	Sapphire/Silicon
5	Detector	HgCdTe/InAs/InAsSb/GaAs
4	Window	Al2O3/ZnSe AR
3	Detector cap	Stainless steel
2	Detector case	Stainless steel
1	TO66 header	Gold plated Kovar

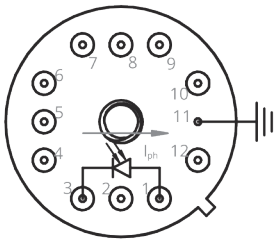
FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale	Sheet	Size	This document is the property of VIGO Photonics S.A. and may not be disclosed to third parties, copied or used in whole or in part for any purpose without written permission from VIGO Photonics S.A.
		5:1	1/1	A4	

Drawing No.	Rev.	Title
ZTM-TO66-Z030	8	Detector TO66 3TE - immersion

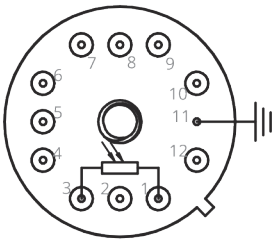
Bottom view

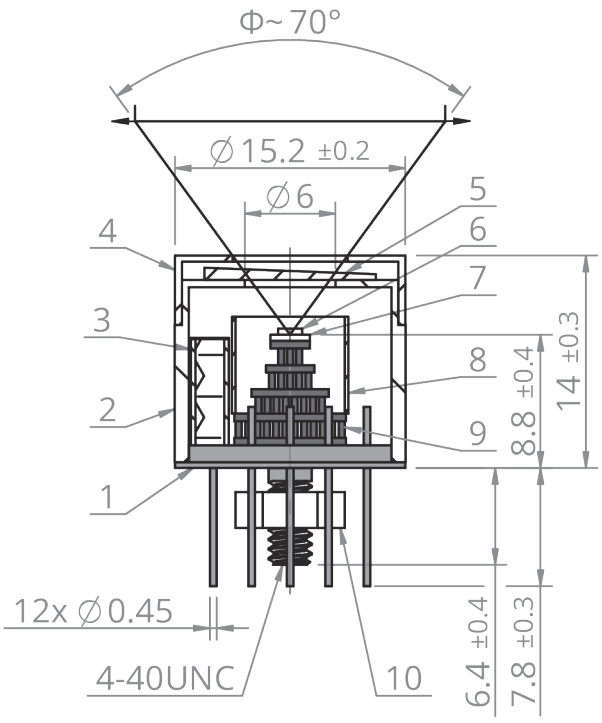


Bottom view
Photovoltaic

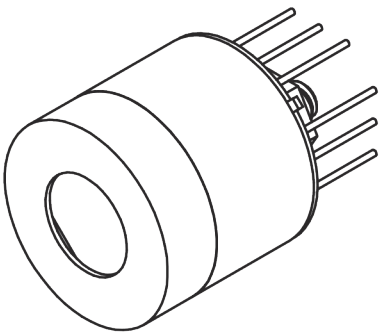


Bottom view
Photoconductive





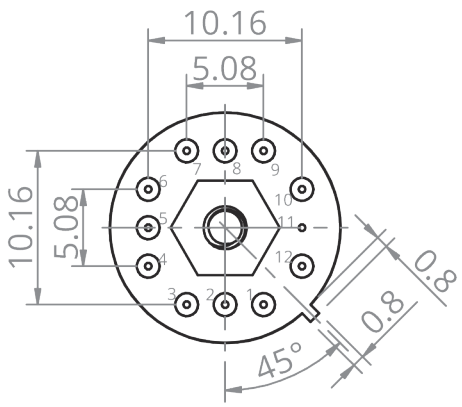
Pinout		
Pin No.	Connection	
	Photovoltaic	Photoconductive
1	Detector anode	Detector
2	TE cooler (+)	TE cooler (+)
3	Detector cathode	Detector
4	Not used	Not used
5	Not used	Not used
6	Not used	Not used
7	Thermistor	Thermistor
8	TE cooler (-)	TE cooler (-)
9	Thermistor	Thermistor
10	Not used	Not used
11	Chassis ground	Chassis ground
12	Not used	Not used



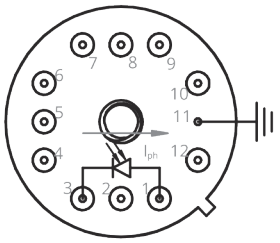
No.	Name	Material
10	4-40 UNC A2 nut	Stainless steel
9	Thermoelectric cooler	
8	Anticonvection shield	POM
7	Detector carrier	Sapphire/Silicon
6	Detector	HgCdTe/InAs/InAsSb/GaAs
5	Window	Al2O3/ZnSe AR
4	Detector cap	Stainless steel
3	Humidity absorber container	Stainless steel
2	Detector case	Stainless steel
1	TO8 header	Gold plated Kovar

FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	
Drawing No. ZTM-TO8-Z041		Rev. 8	Title Detector TO8 4TE - no immersion		

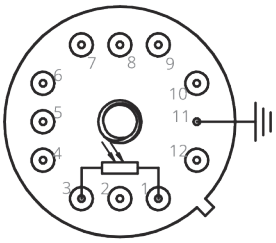
Bottom view

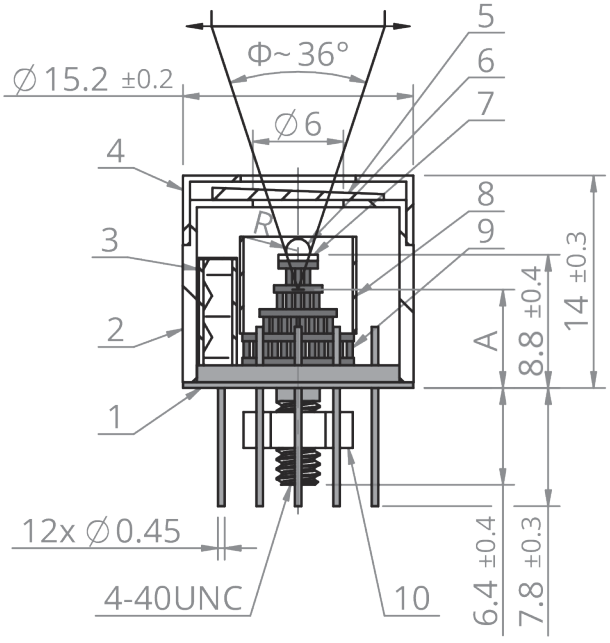


Bottom view
Photovoltaic



Bottom view
Photoconductive

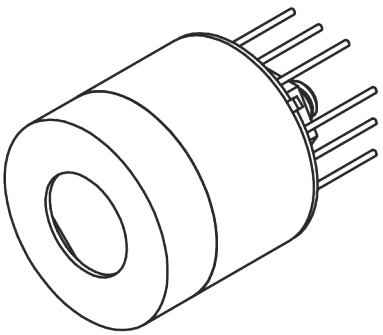




Pinout		
Pin No.	Connection	
	Photovoltaic	Photoconductive
1	Detector anode	Detector
2	TE cooler (+)	TE cooler (+)
3	Detector cathode	Detector
4	Not used	Not used
5	Not used	Not used
6	Not used	Not used
7	Thermistor	Thermistor
8	TE cooler (-)	TE cooler (-)
9	Thermistor	Thermistor
10	Not used	Not used
11	Chassis ground	Chassis ground
12	Not used	Not used

Immersion lens shape	Hyperhemisphere	
Detector optical area [mm²]	0.5x0.5	1x1
R [mm]	0.5	0.8
A [mm]	7.3±0.4	6.4±0.4

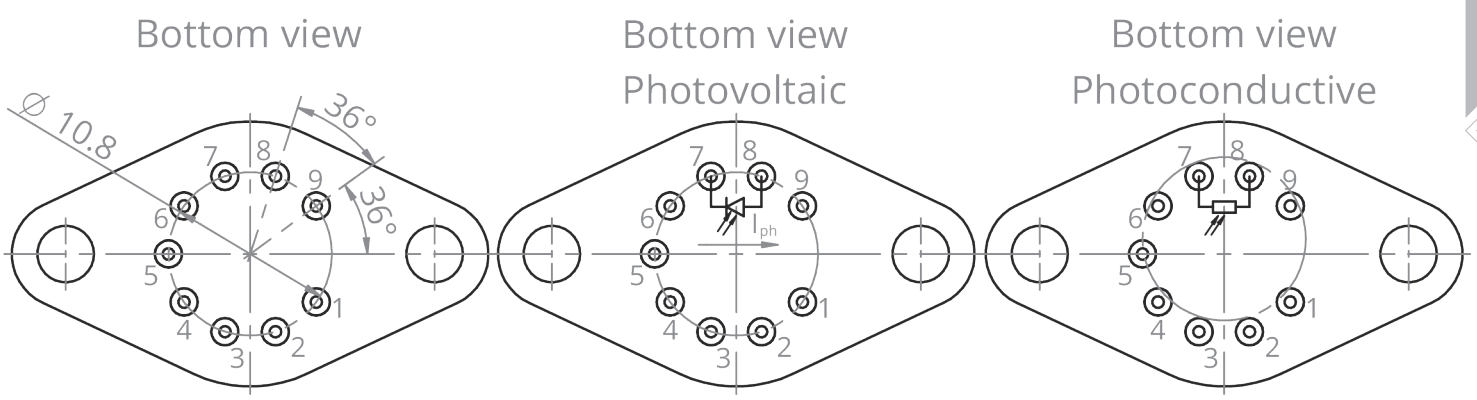
A - Distance from the bottom of the TO8 header to the focal plane

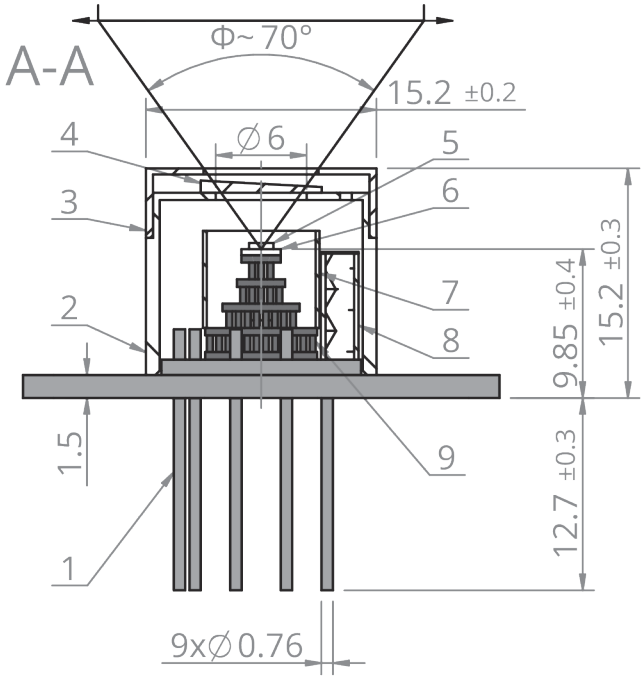


No.	Name	Material
10	4-40 UNC A2 nut	Stainless steel
9	Thermoelectric cooler	
8	Anticonvection shield	POM
7	Detector carrier	Sapphire/Silicon
6	Detector	HgCdTe/InAs/InAsSb/GaAs
5	Window	Al2O3/ZnSe AR
4	Detector cap	Stainless steel
3	Humidity absorber container	Stainless steel
2	Detector case	Stainless steel
1	TO8 header	Gold plated Kovar

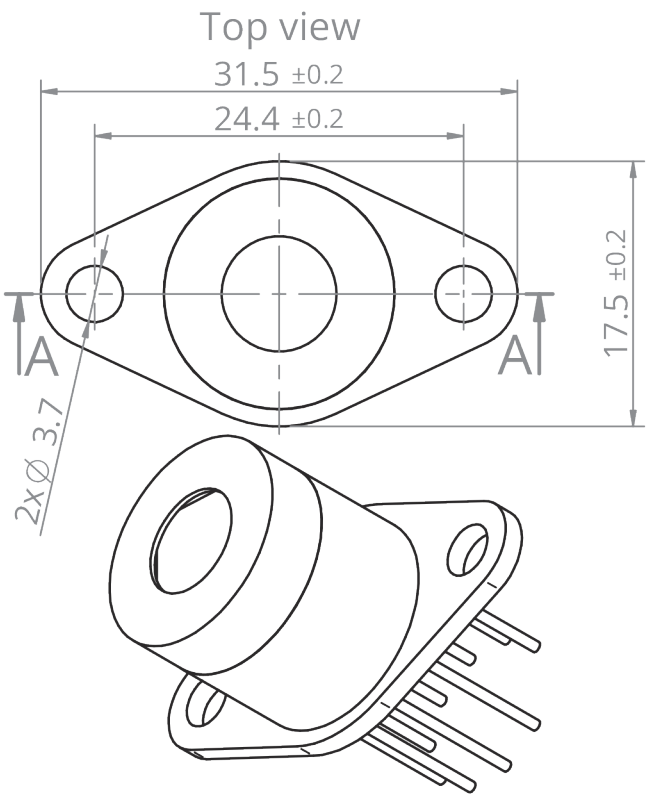
FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	

Drawing No.	Rev.	Title
ZTM-TO8-Z040	8	Detector TO8 4TE - immersion



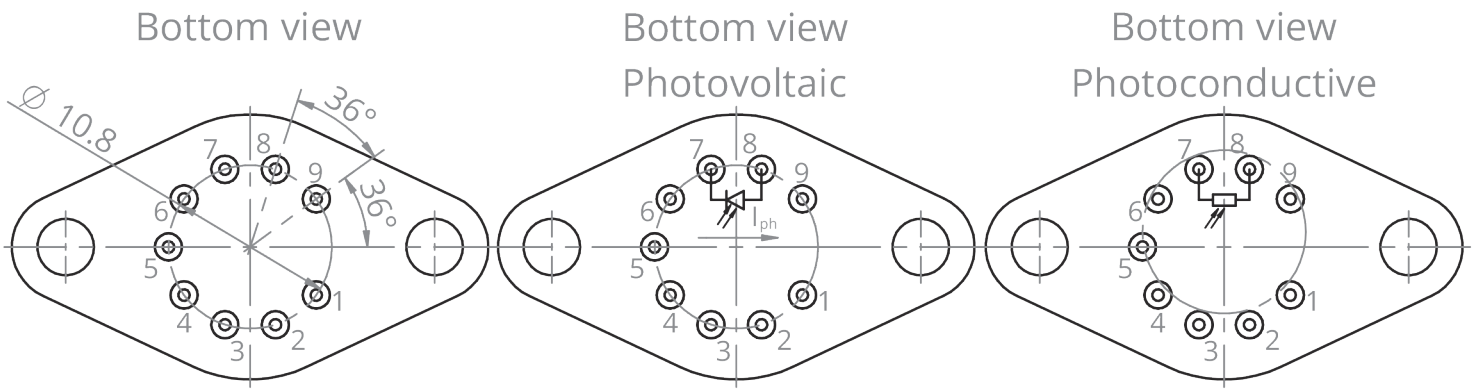


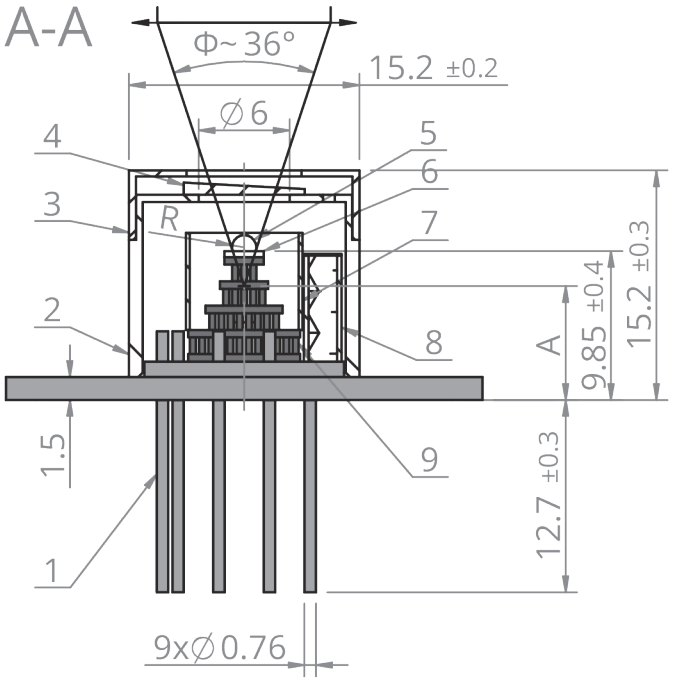
Pinout		
Pin No.	Connection	
	Photovoltaic	Photoconductive
1	TE cooler (+)	TE cooler (+)
2	Not used	Not used
3	Not used	Not used
4	Not used	Not used
5	Thermistor	Thermistor
6	Thermistor	Thermistor
7	Detector cathode	Detector
8	Detector anode	Detector
9	TE cooler (-)	TE cooler (-)



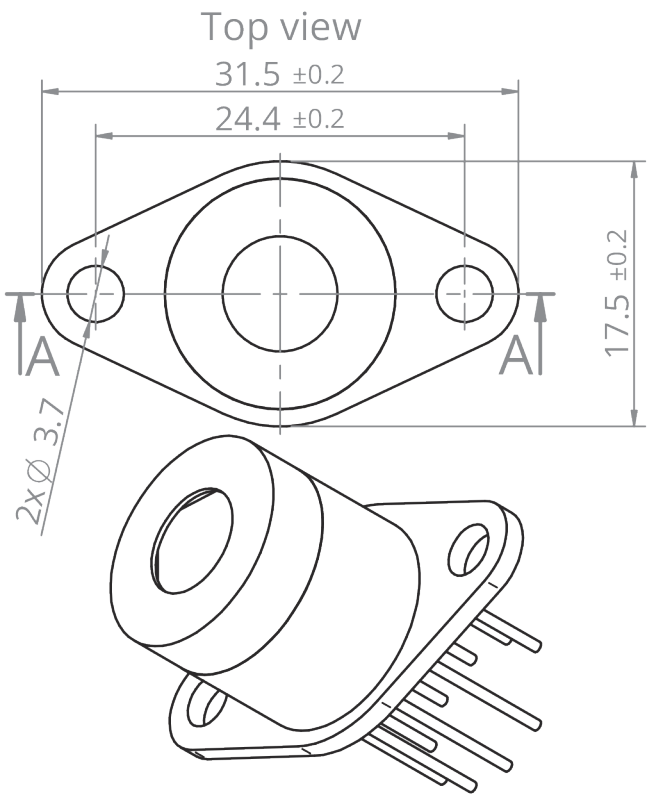
9	Thermoeletric cooler	
8	Humidity absorber container	Stainless steel
7	Anticonvection shield	POM
6	Detector carrier	Sapphire/Silicon
5	Detector	HgCdTe/InAs/InAsSb/GaAs
4	Window	Al2O3/ZnSe AR
3	Detector cap	Stainless steel
2	Detector case	Stainless steel
1	TO66 header	Gold plated Kovar
No.	Name	Material

FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	This document is the property of VIGO Photonics S.A. and may not be disclosed to third parties, copied or used in whole or in part for any purpose without written permission from VIGO Photonics S.A.
Drawing No. ZTM-TO66-Z041		Rev. 7	Title Detector TO66 4TE - no immersion		





Pinout		
Pin No.	Connection	
	Photovoltaic	Photoconductive
1	TE cooler (+)	TE cooler (+)
2	Not used	Not used
3	Not used	Not used
4	Not used	Not used
5	Thermistor	Thermistor
6	Thermistor	Thermistor
7	Detector cathode	Detector
8	Detector anode	Detector
9	TE cooler (-)	TE cooler (-)



Immersion lens shape	Hyperhemisphere	
Detector optical area [mm²]	0.5x0.5	1x1
R [mm]	0.5	0.8
A [mm]	8.35±0.40	7.45±0.40

A - Distance from the bottom of the TO66 header to the focal plane

No.	Name	Material
9	Thermoeletric cooler	
8	Humidity absorber container	Stainless steel
7	Anticonvection shield	POM
6	Detector carrier	Sapphire/Silicon
5	Detector	HgCdTe/InAs/InAsSb/GaAs
4	Window	Al2O3/ZnSe AR
3	Detector cap	Stainless steel
2	Detector case	Stainless steel
1	TO66 header	Gold plated Kovar

FIRST ANGLE PROJECTION	UNIT: mm GENERAL TOLERANCE: ISO 2768-mK	Scale 5:1	Sheet 1/1	Size A4	This document is the property of VIGO Photonics S.A. and may not be disclosed to third parties, copied or used in whole or in part for any purpose without written permission from VIGO Photonics S.A.
	Drawing No. ZTM-TO66-Z040		Rev. 7	Title Detector TO66 4TE - immersion	