



**GPD OPTOELECTRONICS CORP**  
**PRODUCT SPECIFICATIONS SHEET**

CUSTOMER: ANY	NO. IAV203
CITY:	TYPE: APD PHOTODIODE
CUST. DWG.	PKG. *T0-46 2 lead MAT InGaAs
DEVICE MARKING	
(a) G	
(b) IAV203	
(c) DC	

**GROUP A AND/OR PERFORMANCE CHARACTERISTICS**

NO.	PARAMETER CONDITIONS @ 23°C ± 2°C	MIN	TYP	MAX	UNITS
1	Wavelength Range	1000		1630	nm
2	Responsivity @ M = 1 1550 nm wavelength	0.85	0.90	0.95	A/W
3	Dark Current @ M=10		8	25	nA
4	Operating voltage, V <sub>r</sub> @ M=10	43	55	67	volts
5	Breakdown Voltage, V <sub>br</sub> (I <sub>d</sub> = 10 μA)	50	63	75	volts
6	Active Diameter	200	205	210	μm
7	Capacitance @ M=10		1.8	2.2	pF
8	Temperature coeff. of V <sub>br</sub> (23°C)		0.075	0.080	V/°C
9	Bandwidth @ M = 5	0.5	1.5	2.0	GHz
10	Bandwidth @ M = 10	1	1.5	2.0	GHz
11	Bandwidth @ M = 20	0.5	1.0	1.5	GHz
12	Excess Noise Factor, F @ M = 10		3.2	3.7	
13	Excess Noise Factor, F @ M = 20		5.5	6.0	
14	Noise Equivalent Power, NEP @ M = 10		0.032	0.1	pW/Hz <sup>1/2</sup>
15	<b><u>ABSOLUTE MAXIMUM CONDITIONS</u></b>				
16	Operating Temp Range	-40		70	°C
17	Storage Temp Range	-40		85	°C
18	Max Reverse Current			1	mA
19	Max Forward Current	0		10	mA
20	Optical Input (10 nsec pulse)			>200	kW/cm <sup>2</sup>
21	Optical Input (average)			0	dBm

**SPECIAL REQUIREMENTS**

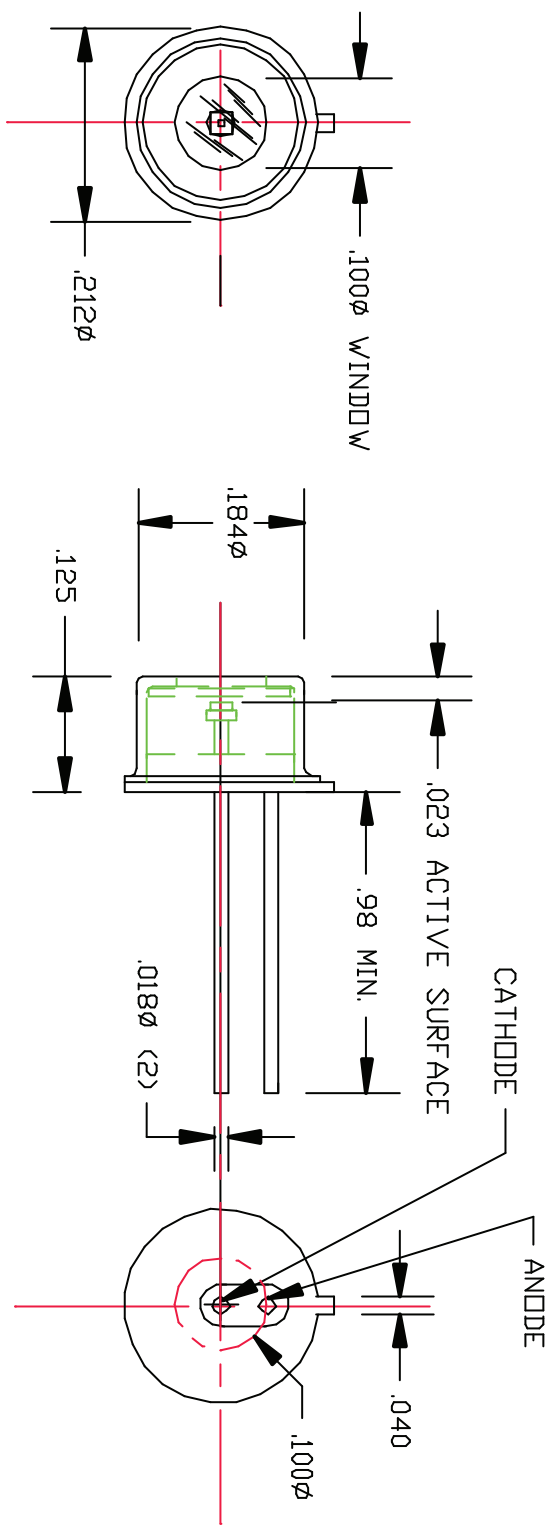
\*TO-46 2 lead Modified Package Window Cap Outline Drawing#13331 200 Micron Dia. Active Area  
 \*The following data is required for each unit. Breakdown Voltage @ 10μA, Operating Voltage and Dark Current for Gain=10,15and 20, Responsivity (X.XX A/W) @ M=1; 1550 nm. \*Test conditions @ 23°C ± 2°C RoHS Compliant

REVISION										APPROVED	
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A-13331

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
A		ORIGINATE & RELEASE	1/6/10	



APPROVALS

USED ON	BY	DATE
DRFT.	C.M.W.	1/6/10
CHK.		
ENG.		
PROC.		

TOLERANCES

ALL DIMS. ARE IN INCHES  
 XX PLACE DEC.F.010  
 XXX PLACE DEC.F.005  
 FRACTIONS ± 1/64  
 ANGLES ± 0.5°

FINISH:  
 MATERIAL:

GPD OPTOELECTRONICS CORP.  
 7 MANOR PARKWAY, SALEM, NH. 03079-2842  
 OUTLINE IAV203

SIZE	FSCM NO.	DWG NO.	REV
A	53399		A

SCALE	SHEET	OF
5:1	1	1

MARK