



InAs Photodiode IA35-Series

Description

The IA35-series is a heterostructure photodiode matched to InAs substrate with a nominal wavelength cut-off at 3.5 μm .

Features

- 20 % cut-off wavelength $\geq 3.50 \mu\text{m}$
- Typical peak responsivity: 1.05 A/W
- Excellent temperature stability
- Mounted in TO-46 package with sapphire window



Applications

- Non-contact temperature measurement
- Spectrophotometer
- Diode laser monitoring
- Gas analysis



Optical Characteristics Specifications @ 25 °C

Part Number	Diameter [μm]	20% Cut off Wavelength ^a [μm]	Peak Wavelength ^a [μm]	Peak Responsivity ^a [A/W]		Responsivity [A/W]					
						@ 900 nm ^a		@ 2800 nm ^a		@ 3200 nm ^a	
			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
IA35S500S4i	500	3.50	2.8	0.95	1.08	n.a.	0.1	0.95	1.05	n.a.	0.90

^a Parameter tested on batch level

^b Parameter 100% tested

Electro-Optical Characteristics Specifications @ 25 °C

Part Number	Diameter [μm]	Shunt Impedance @ V _R = 10 mV ^b [Ohm]		Dark Current @ V _R = 0.1 V ^b [mA]		Peak D* ^a [cm Hz ^{1/2} / W]	Peak NEP ^a [W / Hz ^{1/2}]	Capacitance @ V _R = 0 V ^a [pF]
		Min.	Typ.	Typ.	Max.			
IA35S500S4i	500	450	700	0.15	1	1.0 E10	6.0 E-12	1000

^a Parameter tested on batch level

^b Parameter 100% tested

Absolute Maximum Ratings

	Min.	Max.
Storage temperature [°C]	-55	+80
Operating temperature [°C]	-40	+60
Reverse bias, cw [V]	-	0.25
Forward current, cw [mA]	-	10
Soldering temperature, 5 sec. [°C]	-	260
ESD damage threshold, human body model class 1A*, [V]	0	<250

* ANSI / ESD STN5. 1-2007

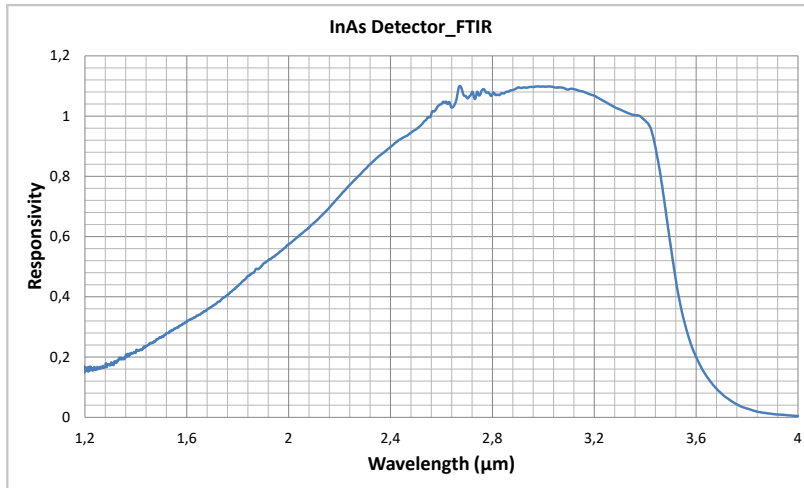


海纳光学

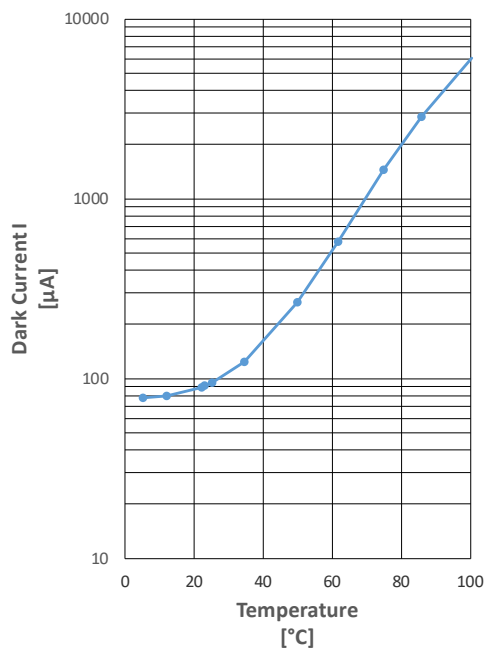
电话: 0755-84870203

邮箱: sales@highlightoptics.com

Spectral Response



Temperature Dependence of the Dark Current



Germany & Other Countries

Laser Components Germany GmbH
Tel: +49 8142 2864 - 0
Fax: +49 8142 2864 - 11
info@lasercomponents.com
www.lasercomponents.com

France

Laser Components S.A.S.
Tel: +33 1 39 59 52 25
Fax: +33 1 39 59 53 50
info@lasercomponents.fr
www.lasercomponents.fr

United Kingdom

Laser Components (UK) Ltd.
Tel: +44 1245 491 499
Fax: +44 1245 491 801
info@lasercomponents.co.uk
www.lasercomponents.co.uk

Nordic Countries

Laser Components Nordic AB
Tel: +46 31 703 71 73
Fax: +46 31 703 71 01
info@lasercomponents.se
www.lasercomponents.se

USA

Laser Components USA, Inc.
Tel: +1 603 821 - 7040
Fax: +1 603 821 - 7041
info@laser-components.com
www.laser-components.com



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

Germany & Other Countries

Laser Components Germany GmbH
Tel: +49 8142 2864 - 0
Fax: +49 8142 2864 - 11
info@lasercomponents.com
www.lasercomponents.com

France

Laser Components S.A.S.
Tel: +33 1 39 59 52 25
Fax: +33 1 39 59 53 50
info@lasercomponents.fr
www.lasercomponents.fr

United Kingdom

Laser Components (UK) Ltd.
Tel: +44 1245 491 499
Fax: +44 1245 491 801
info@lasercomponents.co.uk
www.lasercomponents.co.uk

Nordic Countries

Laser Components Nordic AB
Tel: +46 31 703 71 73
Fax: +46 31 703 71 01
info@lasercomponents.se
www.lasercomponents.se

USA

Laser Components USA, Inc.
Tel: +1 603 821 - 7040
Fax: +1 603 821 - 7041
info@laser-components.com
www.laser-components.com