

**KPPB1-LG125**

InGaAs PIN Photodiode is high sensitive and reliable for data and telecommunication applications.

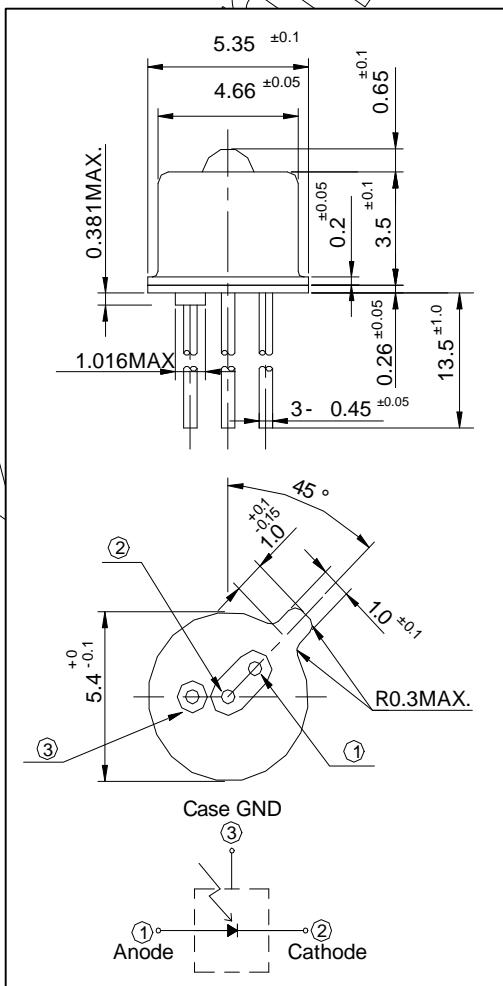
**FEATURES**

- Industry standard TO-46 package with cap lens.
- Optimized for fiber optic application.
- High coupling efficiency to multi-mode fibers directly.
- Low dark current and low capacitance.

**APPLICATIONS**

- Optical fiber communications
- Fiber channel
- Gigabit Ethernet

DIMENSION Unit:(mm)

**ABSOLUTE MAXIMUM RATINGS**

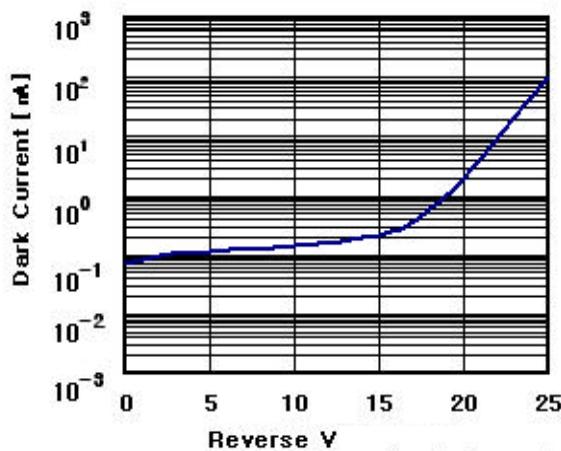
Item	Symbol	Ratings	Unit
Operating Temperature	T <sub>opr.</sub>	-40 ~ +80	
Storage Temperature	T <sub>sta.</sub>	-40 ~ +100	
Reverse Voltage	V <sub>R</sub>	30	V
Reverse Current	I <sub>R</sub>	0.5	mA
Forward Current	I <sub>F</sub>	2	mA

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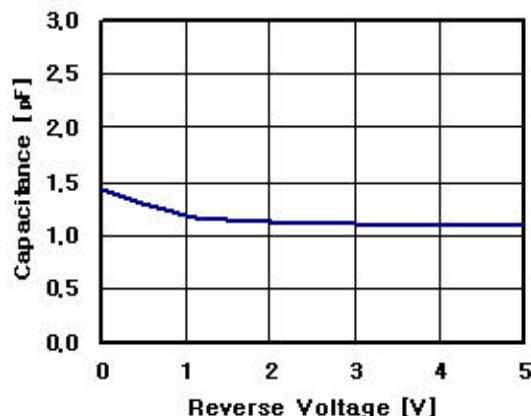
## ELECTRO-OPTICAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Active area	-	-	50	-	μm	
Spectral response range		0.9	-	1.7	μm	
Peak sensitivity wavelength	p		1.55		μm	
Photo sensitivity =1.3μm	S	0.8	0.9	-	A/W	V <sub>R</sub> =5V
=1.55μm		0.85	0.95	-		
Dark current	I <sub>DARK</sub>	-	0.1	1	nA	V <sub>R</sub> =5V
3 dB cut-off frequency	f <sub>-3dB</sub>	2.0			GHz	V <sub>R</sub> =5V, R <sub>L</sub> =50
Terminal capacitance	C <sub>t</sub>	-	1.0	1.3	pF	V <sub>R</sub> =5V, f=1MHz

Dark Current vs. Reverse Voltage



C-V characteristics



Dark Current vs. Operating Temperature

