

# KRT-14211C

## Description

KRT-14211C are InGaAs PIN photo diodes with various diameter options of active area.

KRT-14211C are packaged in industry standard TO-46 stem with long ball lens cap.

They are recommended for digital optical communications.

## Features

- Front illuminated planar PIN-PD
- Low capacitance and low dark current
- Hermetically sealed TO-46 package with long ball lens cap.
- High reliability and environmental endurance
- Wide operating wavelength range from 1.1μm to 1.6μm
- Wide operating temperature range from -40°C to 85°C

## Applications

- High speed Data Communications
- Gigabit Ethernet
- Fiber Channel
- Optical power monitoring

## Absolute Maximum Ratings

Parameter	Symbol	Ratings	Unit
Operating Temperature	$T_{opr}$	0 ~ +85	°C
Storage Temperature	$T_{stg.}$	-40 ~ +100	°C
Reverse Voltage	$V_r$	30	V
Forward Current	$I_f$	10	mW
Reverse Current	$I_r$	10	mA
Soldering Temperature *1	$T_{sol.}$	260	°C

\*1 : Soldering Time  $\leq$  5 seconds (At a distance of 1 mm from the package).

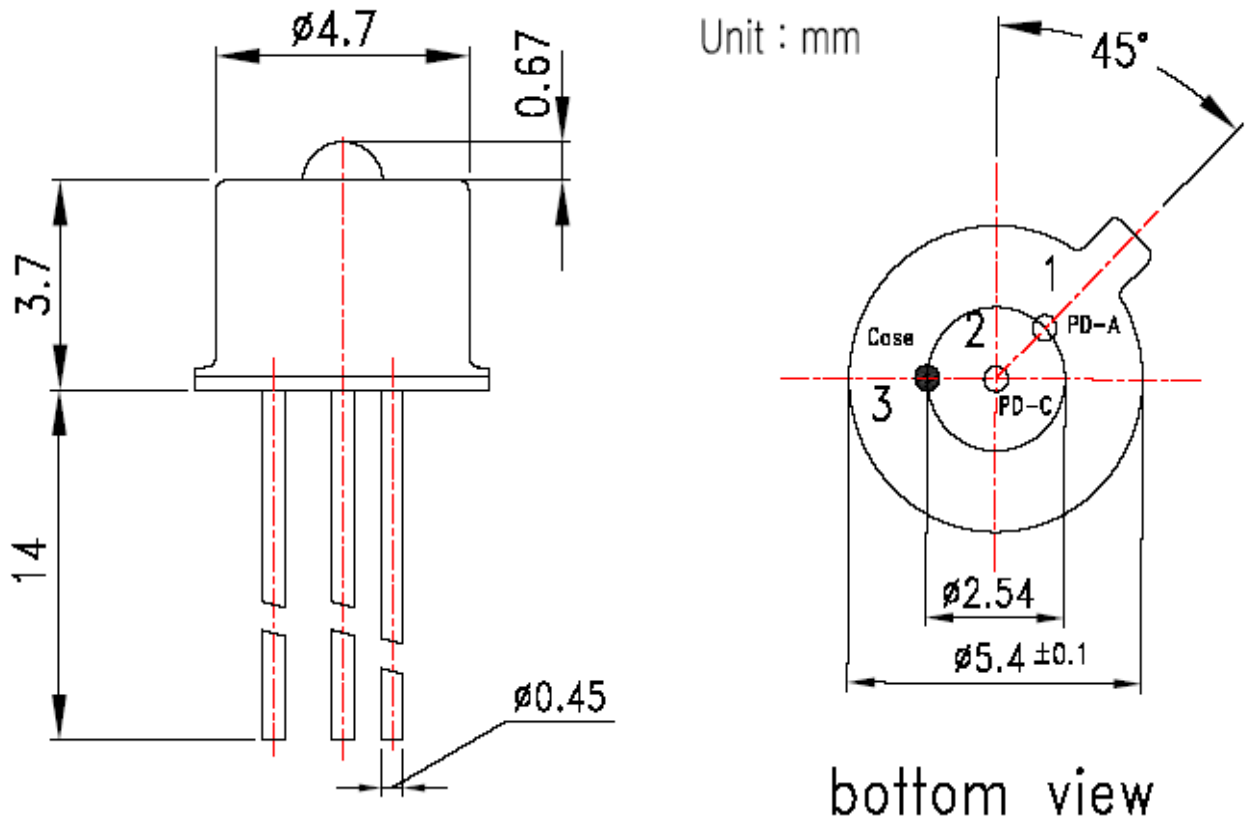
## Electro-Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Active Area	$\varnothing$		50		μm	
Dark Current	$I_D$		0.10	0.2	nA	@ $V_r=5V, 25^\circ C$
Detection Range		1100		1600	nm	
Responsivity	1.31μm	0.80			mA/mW	@ $V_r=5V, 25^\circ C$
	1.55μm	0.85				
Bandwidth	BW	3.0			GHz	@ $V_r=5, R_L=50\Omega$
Capacitance	Cd			0.5	pF	@ $V_r=5V, 25^\circ C$

\* These specifications are subject to change without notice

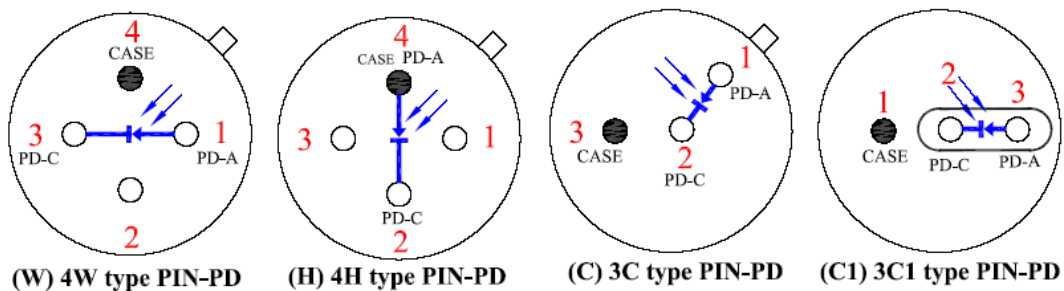
**KRT-14211C**

Outline Drawing



Ordering information

KRT	Device Type	Data Rate	Oper. Voltage	Active Area	Cap Type	Pin Config.		
						3(2)	4	5
<b>KODENSHI Receiver TO CAN</b>	1 : PIN-PD	1 : Monitoring	1 : 3.3 V	1 : Ø50 um	1 : long ball lens cap	C	P	A
	2 : PIN-TIA	2 : 155 Mbps	2 : 5 V	2 : Ø75 um	2 : short ball lens cap	C1	D	B
	6 : Analog PIN PD	3 : 1.25 Gbps	3 : 3.3/5 V	3 : 250 um sq.	3 : long flat window cap	W	I	J
		4 : 2.5 Gbps	x : NA	4 : Ø300 um	4 : short flat window cap	H	T	K
		5 : 5 Gbps		S1 : Ø1.0 mm				M
				S2 : Ø2.0 mm				
				S3 : Ø3.0 mm				



**Pin configuration of PIN PD TO Package (Bottom view)**