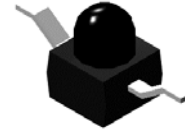


## “Z Bend” Package Silicon Photodiode

### OD KD47

#### Features

- High radiant sensitive
- Low junction capacitance
- Wide radiant sensitive area
- Fast respond speed.
- Daylight filter
- Lens in black color



#### Applications

- Industrial electronics
- Measurement
- Control Circuit
- Interrupter



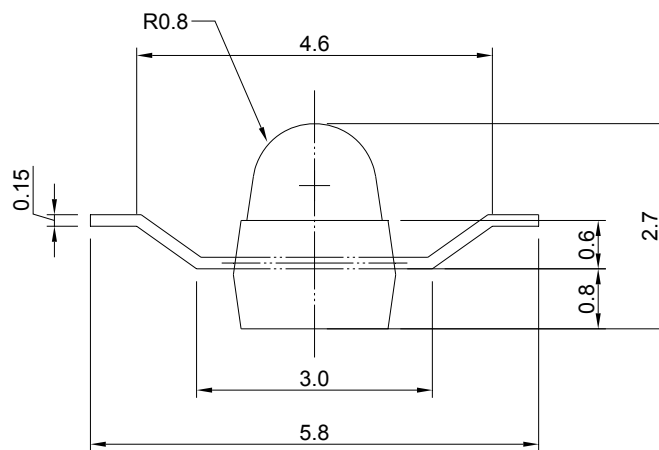
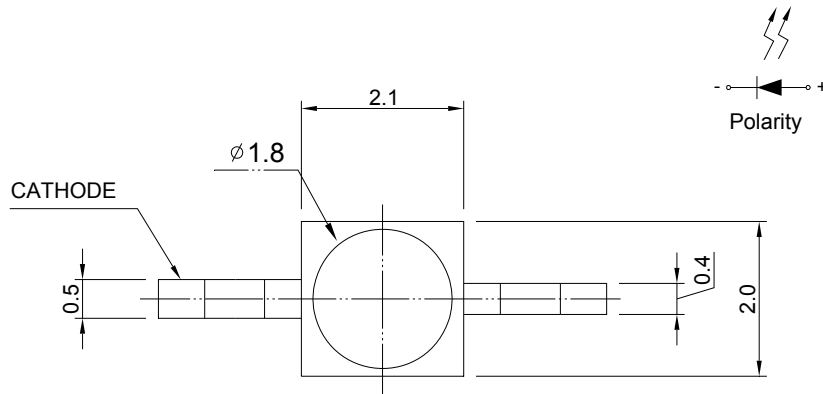
#### Absolute Maximum Rating T(amb) =25°C, unless otherwise specified

Parameter	Symbol	Value	Unit
Reverse Voltage	$V_R$	30	V
Power Dissipation	$P_d$	150	mW
Operating Temperature Range	$T_{opr}$	-30 to + 85	°C
Storage Temperature	$T_{stg}$	-40 to + 85	°C
Soldering Temperature	$T_{sol}$	260	°C

Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specified ratings in this table will result degradation of LED life- span and may cause LED to fail.

**Package Dimension:**

unit : mm



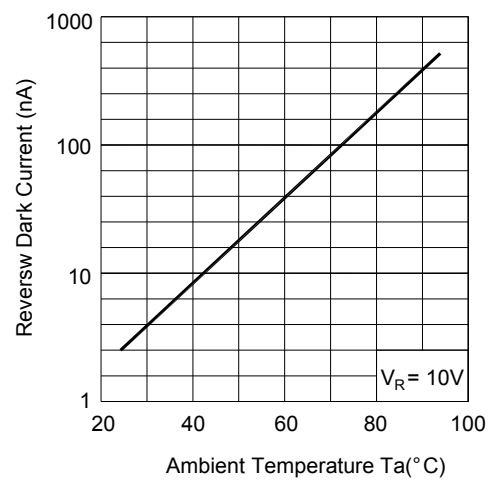
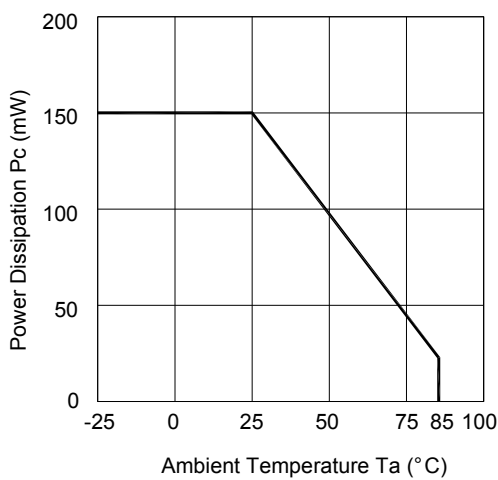
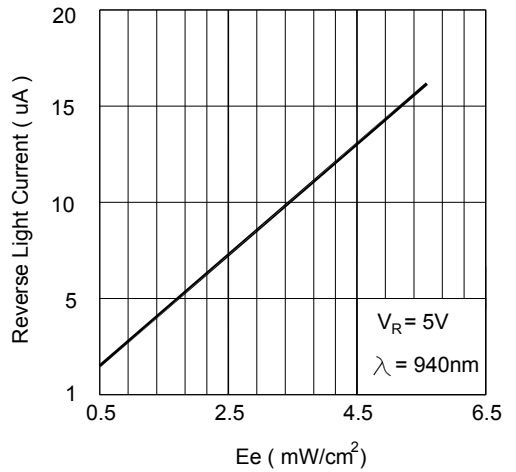
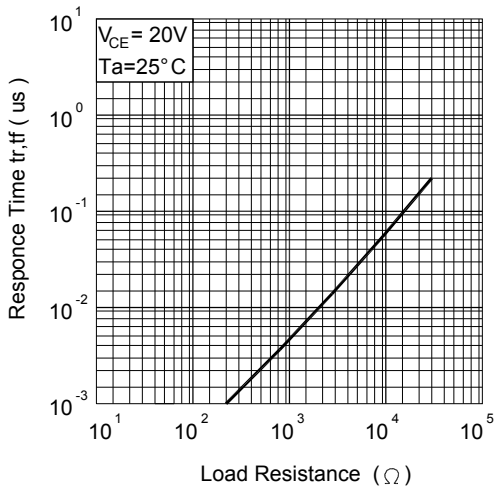
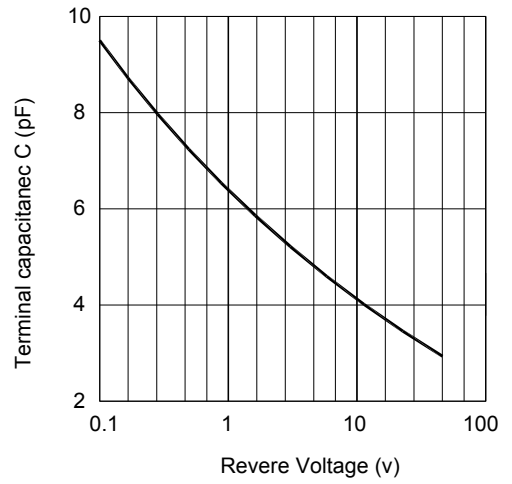
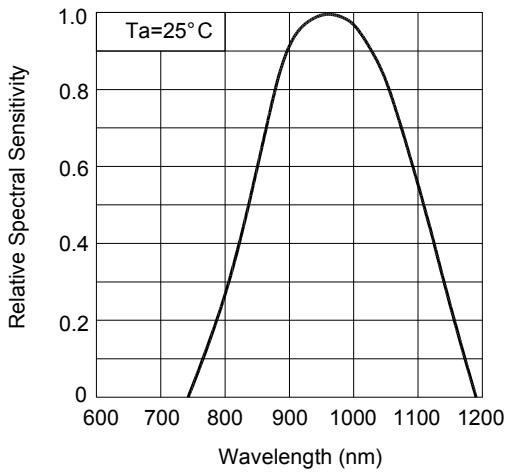
**Notes:**

1. All dimensions are millimeters.
2. Tolerance is  $\pm 0.2\text{mm}$  unless otherwise specified.
3. Specifications are subject to change without notice.

**Optical Characteristics Tamb=25°C, unless otherwise specified**

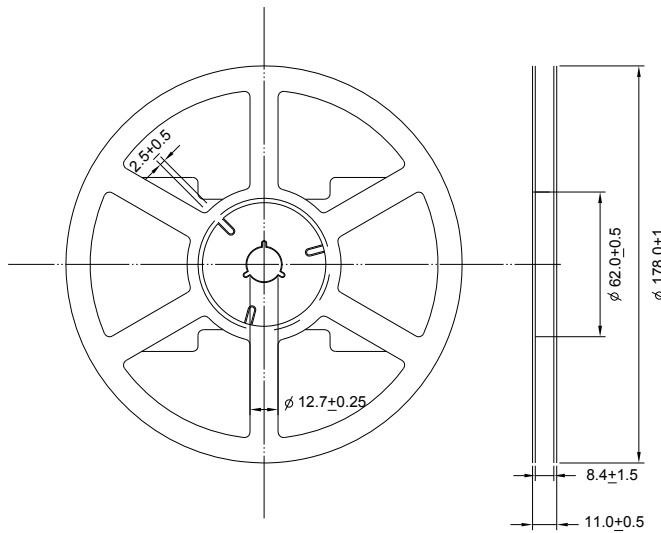
Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Open Circuit Voltage	Ee = 5mW/cm <sup>2</sup> λ p= 940nm	Voc	---	0.4	---	V
Short Circuit Current	Ee = 5mW/cm <sup>2</sup> λ p= 940nm	Isc	---	15	---	μA
Dark Current	Ee = 0mW/cm <sup>2</sup> VR = 10V	ID	---	--	10	nA
Reverse Light Current	Ee = 5mW/cm <sup>2</sup> λ p= 940nm VR = 5V	IL	--	15	---	μA
Total Capacitance	Ee = 0mW/cm <sup>2</sup> VR = 5V f=1MHz	Ct	---	5	---	pF
Reverse Breakdown Voltage	Ee = 0mW/cm <sup>2</sup> IR=100 μA	BVR	32	170	---	V
Range of Spectral Bandwidth	---	λ 0.5	730	---	1200	nm
Wavelength of Peak Sensitivity	---	λ p	---	940	---	nm
Rise Time	VR=10V, RL=1000Ω	tr	---	6	---	nS
Fall Time		tf		6	---	

### Optical Characteristics Curves



**Reel Dimension:**

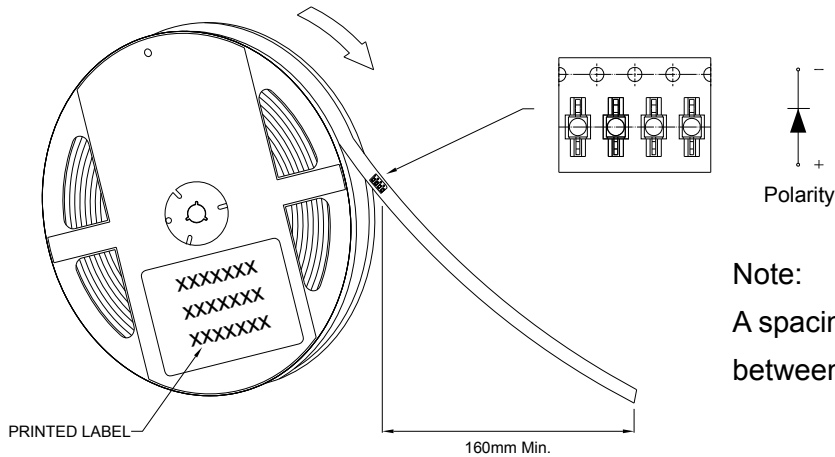
unit : mm



**Note:**

Available in 8mm carrier tape on 178mm diameter reels. (1000 pieces)

USER FEED DIRECTION

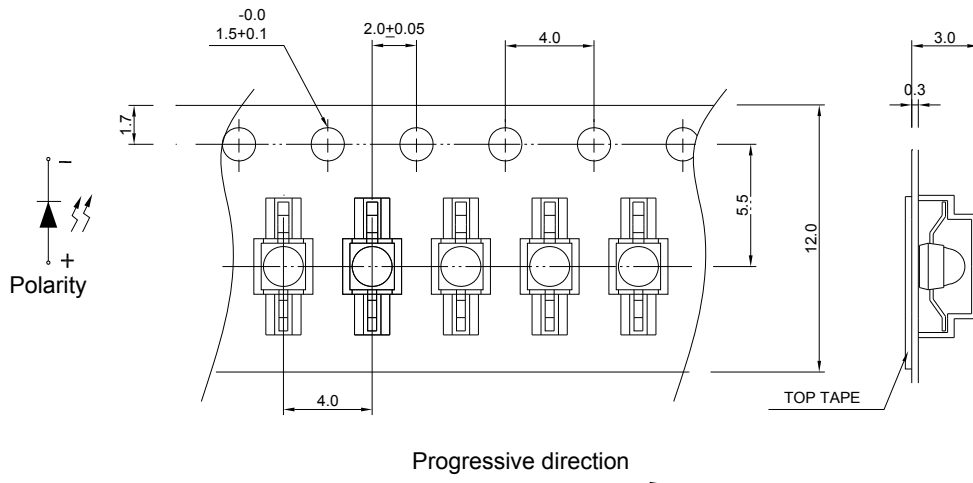


**Note:**

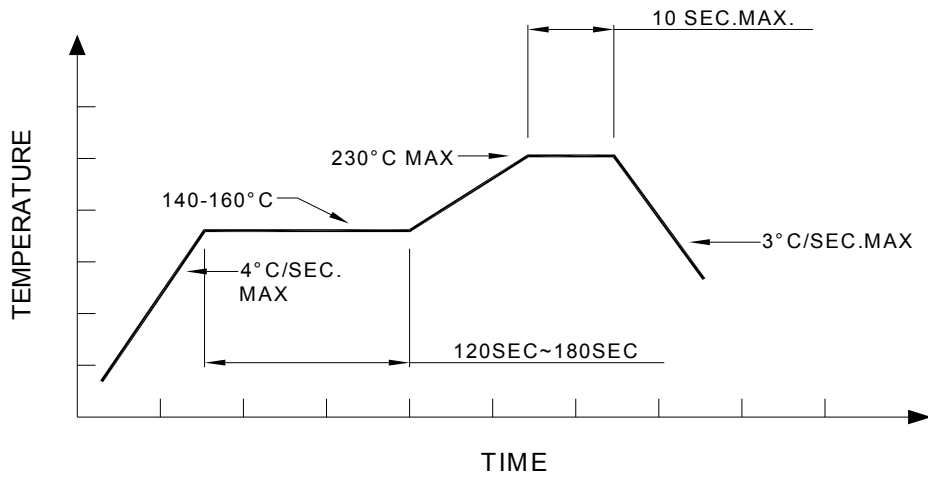
A spacing of approximately 160mm between the front edge of tape

**Tape Dimension:**

unit:mm



**Recommended re-flow soldering profile:**



**Recommended Pb-free re-flow soldering profile:**

