

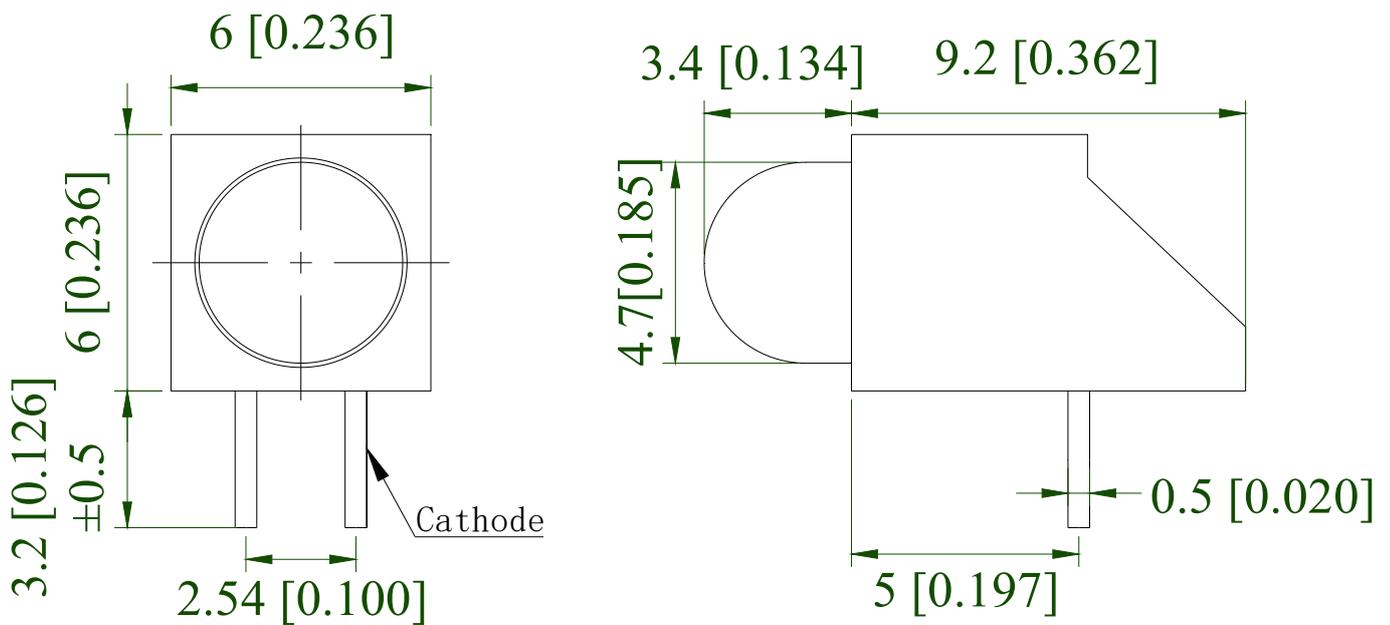
## Features:

- Low power consumption.
- High efficiency.
- Good control and free combinations on the colors of LED lamps.
- Good lock and easy to assembly.
- Stackable and easy to assembly.
- Stackable vertically and easy to assembly.
- Stackable horizontally and easy to assembly.
- Versatile mounting on P.C board or panel.
- Black case enhances contrast ratio.

## Applications:

- Computer.
- Communication.
- Industrial.

Part No.	Emitting Color	Lens Color(LED)
RND 135-00103	Deep Red	Red Diffused



## Absolute Maximum Ratings at Ta=25°C

Parameters	Symbol	Max.	Unit
Power Dissipation	$P_d$	65	mW
Peak Forward Current <sup>(a)</sup>	$I_{FP}$	100	mA
DC Forward Current <sup>(b)</sup>	$I_F$	25	mA
Reverse Voltage	$V_R$	5	V
Operating Temperature Range	$T_{opr}$	-40°C to +80°C	
Storage Temperature Range	$T_{stg}$	-40°C to +85°C	
Soldering Temperature	$T_{sld}$	260°C for 5 Seconds	

Notes:

- a. Derate linearly as shown in derating curve.
- b. Duty Factor = 10%, Frequency = 1 kHz.

## Electrical Optical Characteristics at Ta=25°C

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity <sup>(a)</sup>	$I_v$	20	45	---	mcd	IF=20mA
Viewing Angle <sup>(b)</sup>	$2\theta_{1/2}$	---	60	---	deg.	IF=20mA
Peak Emission Wavelength	$\lambda_p$	---	660	---	nm	IF=20mA
Dominant Wavelength <sup>(c)</sup>	$\lambda_d$	---	640	---	nm	IF=20mA
Spectral Line Half-Width	$\Delta\lambda$	---	45	---	nm	IF=20mA
Forward Voltage	$V_F$	1.6	2.0	2.6	V	IF=20mA
Reverse Current	$I_R$	---	---	10	$\mu A$	VR=5V

Notes:

- a. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- b.  $2\theta_{1/2}$  is the o-axis angle where the luminous intensity is 1/2 the peak intensity.
- c. The dominant wavelength ( $\lambda_d$ ) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

## Typical Electrical / Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted)

