LUCKY LIGHT

LL-304PTD2E-1A

DATA SHEET

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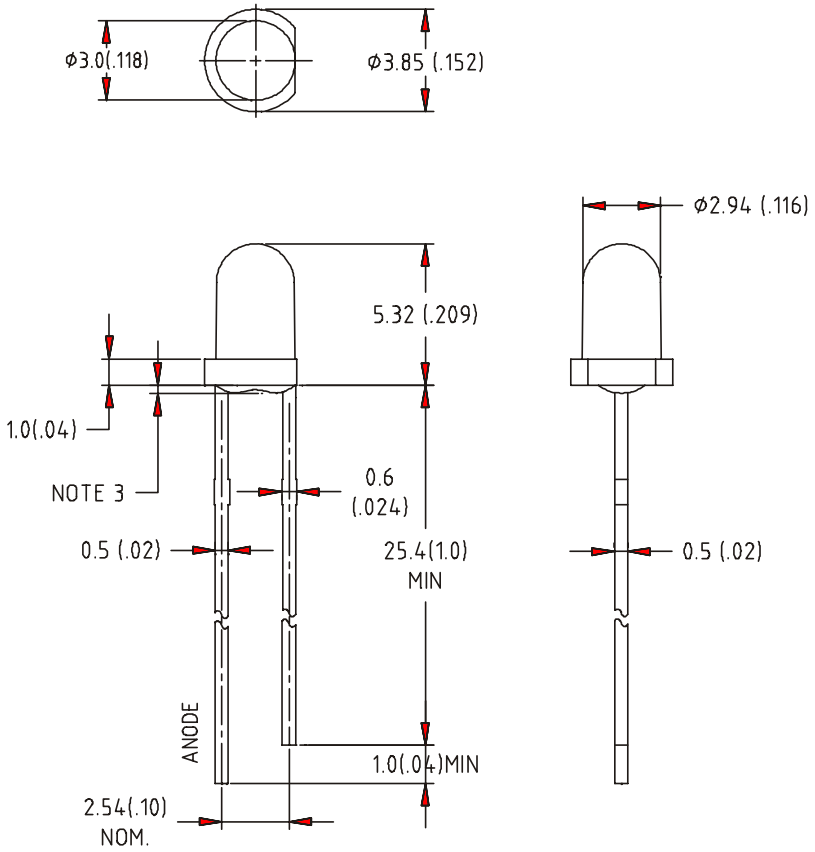
Features

- High photo sensitivity
- Fast response time
- Small junction capacitance
- Standard T-1 3/4 diameter package
- Wide viewing angle
- Photodiode receiver

Package Dimension:



Part NO.	Lens Color	Source Color
LL-304PTD2E-1A	Black Diffused	Photodiode receiver

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(.010”)mm unless otherwise noted.
3. Protruded resin under flange is 1.0mm(.04”) max
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice

Absolute Maximum Ratings at Ta=25℃

Parameter	MAX.	Unit
Power Dissipation	150	mW
Reverse Voltage	35	V
Operating Temperature Range	-25℃ to +80℃	
Storage Temperature Range	-40℃ to +80℃	
Lead Soldering Temperature [4mm(.157") From Body]	260℃ for 5 Seconds	

Electrical Optical Characteristics at Ta=25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Rang of Spectral Bandwidth	$\lambda_{0.5}$	800	---	1050	nm	I_f=20mA
Peak Sensitive Wavelength	λp	---	880	---	nm	I_F=20mA
Open-Circuit Voltage	Voc	---	0.42	---	V	Ee=5mW/㎠ λp=940nm
Short-Circuit Current	Isc	---	16	---	μA	
Reverse Light Current	I_L	---	16	---	μA	Ee=5mW/㎠ λp=940nm,V_R=5V
Dark Current	I_D	---	---	10	nA	Ee=5mW/㎠ V_R=10V
Reverse Breakdown Voltage	BV_R	35	170	---	V	Ee=0mW/㎠ I_R=100μA
Forward Voltage	V_F	---	1.2	1.5	V	I_F=20mA
Terminal Capacitance	Ct	---	2.5	---	pF	Ee=0mW/㎠ V_R=5V,f=1MHz
Rise/Fall Time	t_R/t_F	---	6/6	---	nS	V_R=10V RL=1KΩ

Note:

1. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

Typical Electro-Optical Characteristics Curves

Fig. 1 Power Dissipation vs. Ambient Temperature

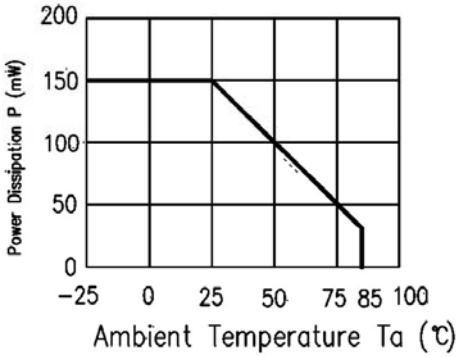


Fig.2 Spectral Sensitivity

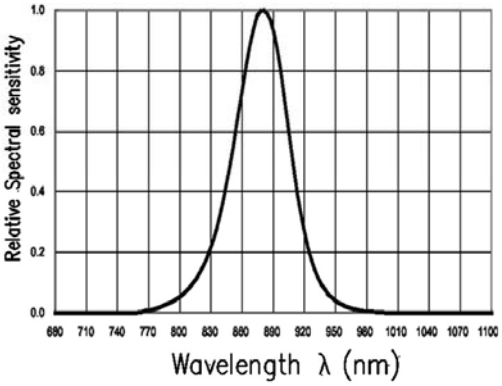


Fig.3 Dark Current vs. Ambient Temperature

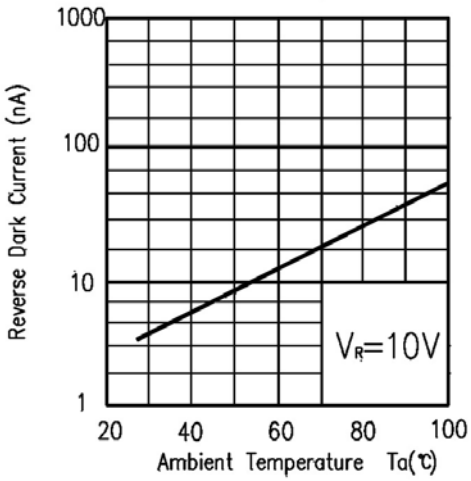


Fig.4 Reverse Light Current vs.Ee

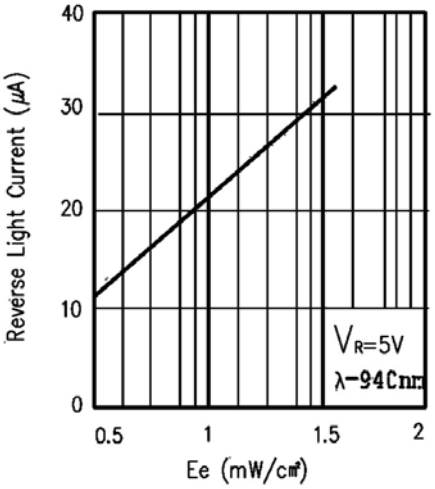


Fig.5 Terminal Capacitance vs. Revere Voltage

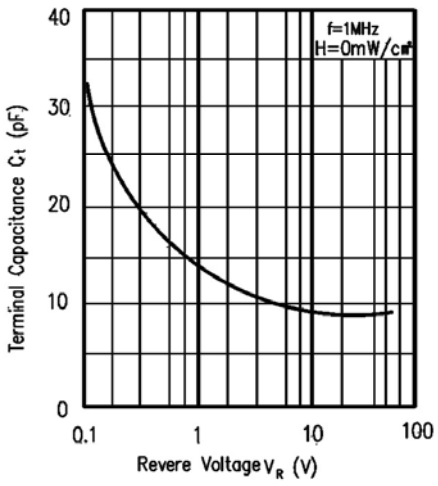


Fig.6 Responce Time vs. Load Resistance