



LG-03PT4D94H-302C **PHOTO TRANSISTOR DATA SHEET**

 SPEC. NO.
 :
 SZ20022102

 DATE
 :
 2021/08/12

 DEV
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<u>A/1</u>

Approved By:

Checked By:

Prepared By:

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LIGHT



Absolute Maximum Ratings at Ta=25°C

Parameter	Maximum Rating	Unit		
Power Dissipation	100	mW		
Collector- Emitter Voltage	30	V		
Emitter- Collector Voltage	5	V		
Operating Temperature	-40°C~+85°C			
Storage Temperature Range	-45℃~+100℃			
Lead Soldering Temperature	260 $^\circ\!\!\mathbb{C}$ for 5 seconds			

1. Storage

The storage ambient for the LEDs should not exceed 30 °C temperature or 70% relative humidity. It is recommended that LEDs out of their original packaging are used within three months. For extended storage out of their original packaging, it is recommended that the LEDs be stored in a sealed container with appropriate desiccant or in desiccators with nitrogen ambient.

2. Precautions in handling:

- When soldering, leave 2mm of minimum clearance from the resin to the soldering point.
- Dipping the resin to solder must be avoided.
- Correcting the soldered position after soldering must be avoided.
- In soldering, do not apply any stress to the lead frame particularly when heated.
- When forming a lead, make sure not to apply any stress inside the resin.
- Lead forming must be done before soldering.
- It is necessary to cut the lead frame at normal temperature.

3. Caution in ESD:

Static Electricity and surge damages the LED. It is recommend to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.



Electrical Optical Characteristics at $Ta=25^{\circ}C$

PARAMETER	SYMBOL	MIN	ТҮР	MAX	UNITS	TEST CONDITIONS
Range of Spectral Bandwidth	$\lambda_{0.5}$	840		1100	nm	
Wavelength of Peak Sensitivity	λ _P		940		nm	
Collector- Emitter Breakdown Voltage	V _{(BR)CEO}	30			V	I _C =0.1mA Ee=0mW/cm ²
Emitter-Collector Breakdown Voltage	$V_{(BR)ECO}$	5			V	I _R =0.1mA Ee=0 mW/cm ²
Collector- Emitter Saturation Voltage	V _{CE(SAT)}			0.5	V	I _c =0.1 mA Ee=1.0mW/cm ²
Rise Time	T _r		15			Vcc=5V R _L =1K Ω I _C =1mA
Fall Time	T _f		15			Vcc=5V R _L =1K Ω I _C =1mA
Viewing Angle	20 _{1/2}		50		Deg.	
Collector Dark Current	I _{CEO}			100	nA	V _{CE} =10V E _e =0 mW/cm ²
On State Collector Current	I _{C(ON)}		9.0		mA	V_{CE} =5V E _e =1.0mW/cm ² λ_{P} =940nm

Note:

1. 2 $_{1/2}$ is the off-axis angle at which the $I_{C(ON)}$ is half the axial $I_{C(ON)}$.

2. The $I_{C(ON)}$ guarantee should be added $\,\pm15\%$ tolerance.

PHOTO TRANSISTOR Specification

●Commodity: PHOTO TRANSISTOR

●Ic(on) Bin Limits

BIN CODE	Min. (mA)	Max. (mA)
63	4.5	6
64	6	8
65	8	10
66	10	12.5
67	12.5	15.6

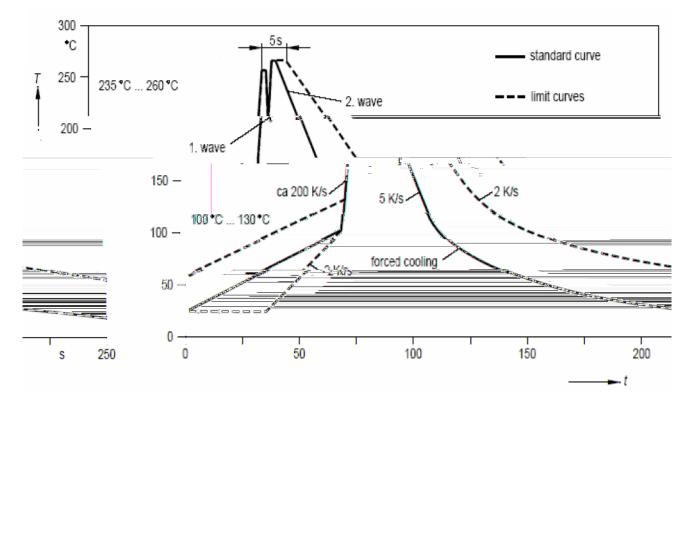
NOTE: The Ic(on) guarantee should be added \pm 15% tolerance.

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Recommended Wave Soldering Profile



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