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PREPARED BY:	DATE:	<h1>SHARP</h1> <p>ELECTRONIC COMPONENTS GROUP SHARP CORPORATION</p> <h2>SPECIFICATION</h2>	SPEC No. DG-944063
APPROVED BY:	DATE:		FILE No.
			ISSUE <b>April, 22, 1994</b>
			PAGE 7 Pages
			REPRESENTATIVE DIVISION <b>OPTO-ELECTRONIC DEVICES DIV.</b>

## DEVICE SPECIFICATION FOR

GaAlAs/GaAlAs Red LED  
Radial type ~~taping~~

MODEL No.

LT6U26TP

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2. Please obey the instructions mentioned below for actual use of this device. Contact a SHARP representative of sales office in advance when you intend to use SHARP devices for any applications other than those applications for general electronic equipment recommend by SHARP at (1).

(1) This device is designed for general electronic equipment.  
Main uses of this device are as follows;

[ OA equipment · AV equipment · Home appliance · Telecommunication  
equipment (Terminal) Measuring equipment · Tooling machine · Computer, etc. ]

(2) Please take proper steps in order to maintain reliability and safety, in case this device is used for the uses mentioned below which require high reliability.

[ Unit concerning control and safety of a vehicle (if plane, train, automobile etc.)  
· Gas leak detection breaker · Traffic signal · Fire box and burglar alarm box  
· Other safety equipment, etc. ]

(3) Please do not use for the uses mentioned below which require extremely high reliability

[ Space equipment · Telecommunication equipment (Trunk)  
· Nuclear control equipment · Medical equipment etc. ]

CUSTOMER'S APPROVAL

DATE

BY

DATE  
PRESENTED  
BY

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Department General Manager of  
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ELECOM Group  
SHARP CORPORATION

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**SHARP**LT6U26TP

This data sheet is to introduce the specification of the light emitting device, Model No. LT6U26TP, delivered to

## 1. Structure and characteristics

Structure: Radial type tapping of GL8UR26T, GaAlAs/GaAlAs Red LED. the leads are straight at 18.0mm from the bottom face of resin.

Taping specifications : See Page 3

Packing specifications : See Page 4,5

Taping test : See Page 6

Outline dimensions and pin connections of GL8UR26T : See Page 7

## 2. Absolute maximum ratings,

(  $T_a = 25^\circ\text{C}$  )

Parameter	Symbol	Value	Unit
Power dissipation	P	75	mW
Continuous Forward current	$I_F$	30	mA
Peak forward current (Note 1)	$I_{FM}$	50	mA
Derating factor	-	(DC) 0.40 (Pulse) 0.67	mA/°C
Reverse voltage	$V_R$	4	V
Operating temperature	$T_{opr}$	-25 ~ +85	°C
Storage temperature	$T_{stg}$	-25 ~ +100	°C
Soldering temperature (Note 2)	$T_{sol}$	260 (within 5 seconds)	

(Note 1) Duty ratio = 1/10, Pulse width = 0.1ms

(Note 2) Distance from the bottom of resin : 1.8 mm

## 3. Electro-optical characteristics

(  $T_a = 25^\circ\text{C}$  )

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$	$I_F = 20\text{mA}$	-	1.85	2.5	V
Luminous intensity (Note 3)	$I_v$		130	400	-	mcad
Peak emission wavelength	$\lambda_p$		-	660	-	nm
Spectrum radiation bandwidth	$\Delta\lambda$		-	20	-	
Reverse current	$I_R$	$V_R = 3\text{V}$	-	-	100	$\mu\text{A}$
Terminal capacitance	Ct	$V = 0\text{V}, f = 1\text{MHz}$	-	25	-	pF

(Note 3) Tolerance:  $\pm 15\%$

**SHARP****3. When an LED lamp is mounted directly on PWB**

If the bottom face of an LED lamp is coated directly on single-sided PWB, the base of the lead pins may be subjected to physical stress due to PWB warp, cutting or clinching of lead pins.

Prior to use, be sure to check that no disconnection inside of the resin or damage to resin etc., is found.

When an LED lamp is mounted on double-sided PWB, the heat during soldering affects the resin; therefore, keep the LED lamp more than 1.6mm float above the PWB.

**4. Others**

If any problem should arise from this specification, the supplier and user should work out a mutually acceptable solution.

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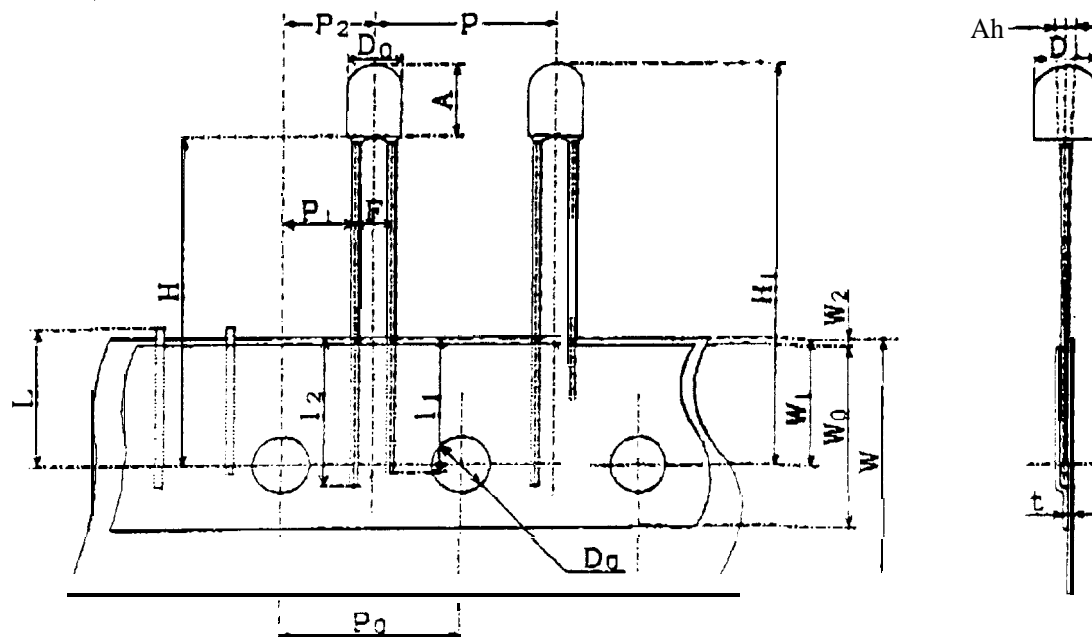
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**SHARP**

## (1) Taping specifications



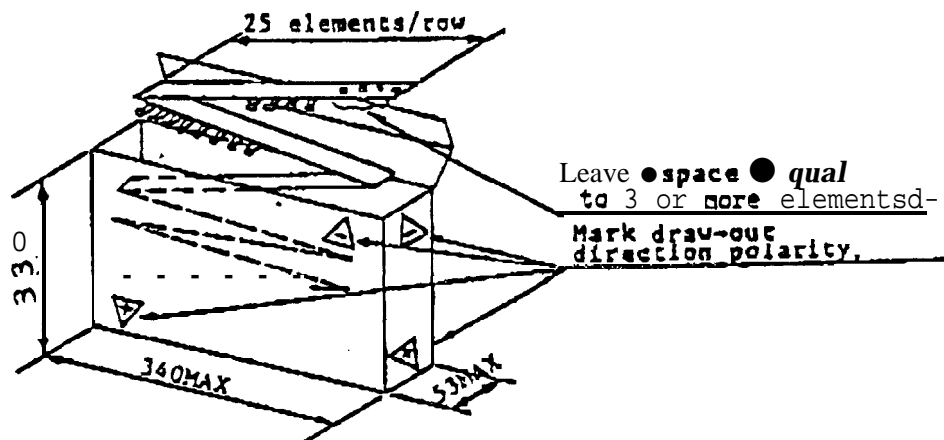
Parameter	Symbol	Dimensions (mm)	Remark
Lamp diameter (Short)	$D_0$	$14.8 \pm 0.2$	
Lamp diameter (Long)	$D_1$	$15.8 \pm 0.2$	
Lamp height	$A$	$7.7 \pm 0.2$	
Lead diameter	$d$	$0.5 \pm 0.1$	
Device spacing (Center to center)	$P$	$12.7 \pm 1.0$	
Hole pitch (Center to center)	$P_0$	$12.7 \pm 0.3$	a
Hole location	$P_1$	$5.08 \pm 0.7$	
	$P_2$	$6.35 \pm 1.3$	
Lead spacing (Center to center)	$F$	2.54 MIN	b
Inclination	$\Delta h$	$0.0 \pm 2.0$	c
Tape width	$W$	$18.0 \pm 0.3$	
Adhesive tape width	$W_0$	$13.0 \pm 0.3$	
Hole center to tape edge	$W_1$	$9.0 \pm 0.5$	
Adhesive tape edge to tape edge	$W_2$	1.0 以下	
Lamp bottom to hole center	$H$	$18.0 \pm 1.0$	
Total length	$H_1$	$25.7 \pm 0.5$	
Covered lead length	$L_1$	13.5 以下	
	$L_2$	14.5 以下	
Hole diameter	$D_0$	$14.0 \pm 0.2$	
Lead length after rejective defective product	$L$	11.0 以下	
Tape thickness (total)	$t$	$0.7 \pm 0.2$	d

- Remark-
- a. Dimension allowance "a" must be 1mm or less per 20 pitches.
  - b. Measuring point shall be below the resin.
  - c. Measuring point shall be the lamp top.
  - d. The base sheet is  $0.37 \pm 0.1$  in thickness.

※Lamp specifications: See Page 7

**SHARP****(2) Packing Specification****1. Packing form****Box type**

- a) Folding type of a radial-type taping dimension (separately discussed) to a length of 25 elements per row.
- b) Leave a space equal to 3 or more elements at both ends of the tape. Model No., luminous intensity rank and polarity are printed
- c) Distinguish cathode draw-out method from anode draw-out method, according to light-emitting diode polarity. The former corresponds to the upper lid opening method and the latter corresponds to the lower lid opening method.



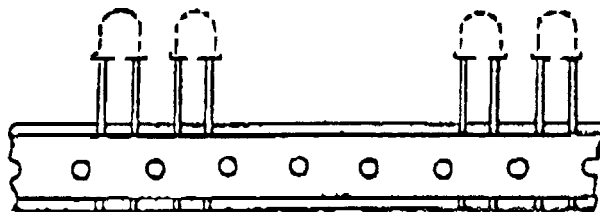
\*Insert cushion material between product and upper or lower lid of the case.

**2. Packing quantity**

2,000 elements per case (standard)

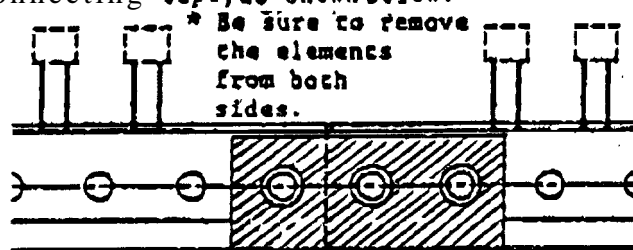
**3. Missing elements**

Three or less consecutive elements may be missing, as shown below.

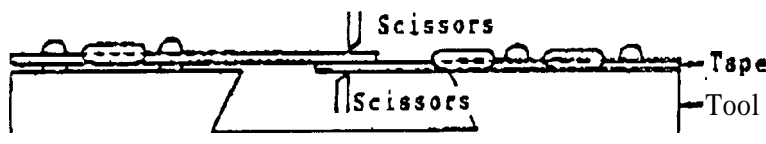


**SHARP****4. Connecting**

- 1) To connect the tapes (case of finishing or cutting the tape), cut the tape ends and connect them using connecting tape, as shown below.

**2) Major points of connecting****① Cutting the tape**

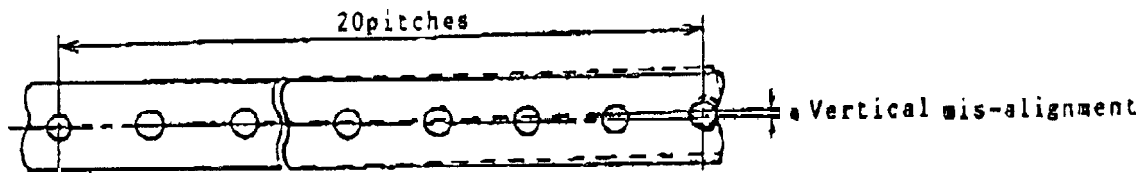
Attach the tapes to tool, as shown below, and cut at the center between feed holes of both tapes using scissors.

**② Connecting the tape**

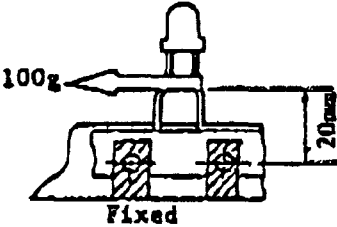
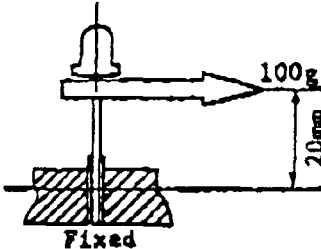
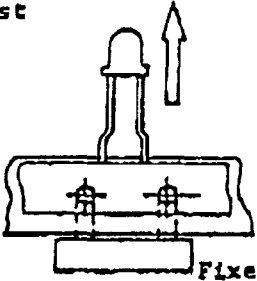
After cutting, connect the tapes using the connecting tape under the condition of attaching them to the tool.

**3) Accuracy of connecting**

The connecting tape should not cover the feed holes (D.). And total tape thickness (t) must be less than 1.5mm after connect. Dimension allowance "a" must be less than 1mm per 20 pitches.



**SHARP****(3) Taping Test**

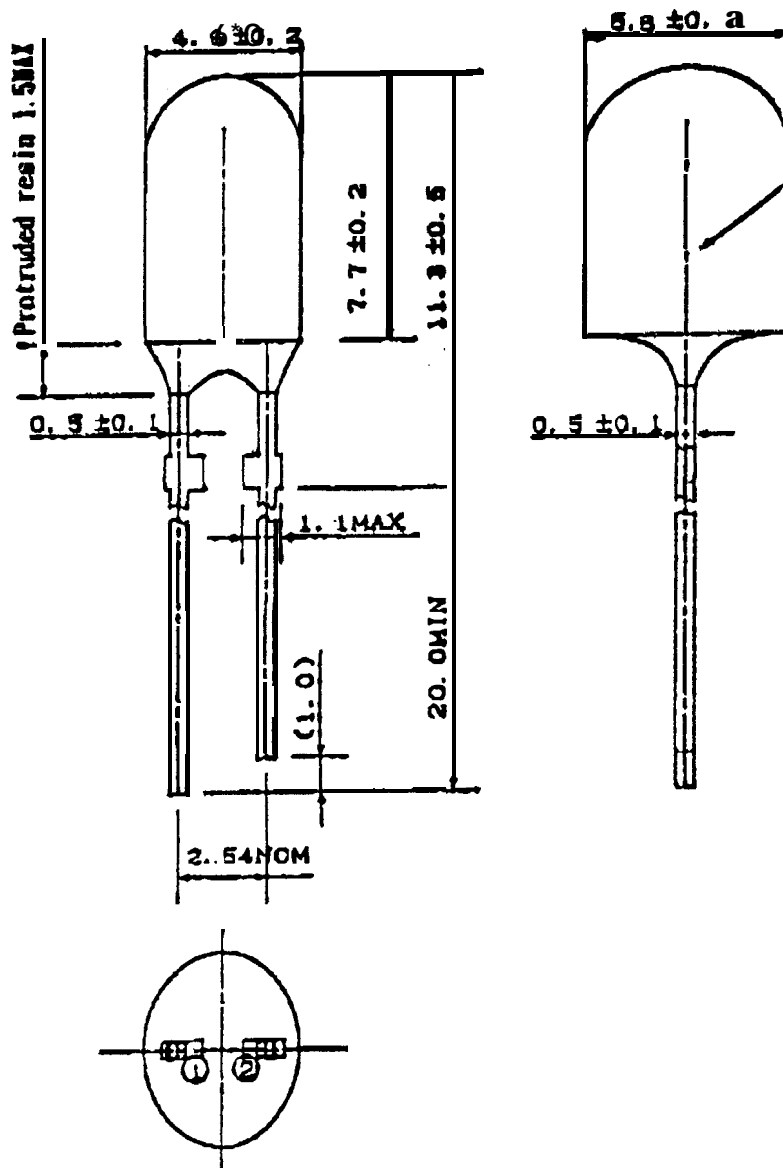
No.	Items	Test Method	Performance Criteria
1	Lead wire strength	1) Horizontal direction  Apply 100g load in the direction shown by the arrow above for 3 sec. ±1.	In accordance with Specifications for Inserted Parts.
		2) Vertical direction  Apply 100g load in the direction shown by the arrow above for 3 sec. ±1.	In accordance with Specifications for Inserted Parts
2	Adhesive test	1) Strength test  Apply 500g load in the direction shown by the arrow for 3 sec. ±1.	Lead wire must not be out of place or missing
		2) Life test Let sample stand at normal temperature and humidity for 6 months.	Same as above

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**SHARP**Pin connections

1. Anode
2. Cathode

Unspecified tol. to be  $\pm 0.2$  mm

UNIT: mm

(Note) Cold rolled steel leads are plated with tin but the tie-bar cut portions have no plating.

DATE	WISE
DRAWING No.	501604024