

51E D ■ 8180798 0007269 115 ■ SRPJ

LT9300□ Series**Thin Case Mold Type
LED Panel Displays****■ Model No.**

LT9300D Red
 LT9300H Yellow
 LT9300E Yellow-green

GaAsP/GaP
 GaAsP/GaP
 GaP

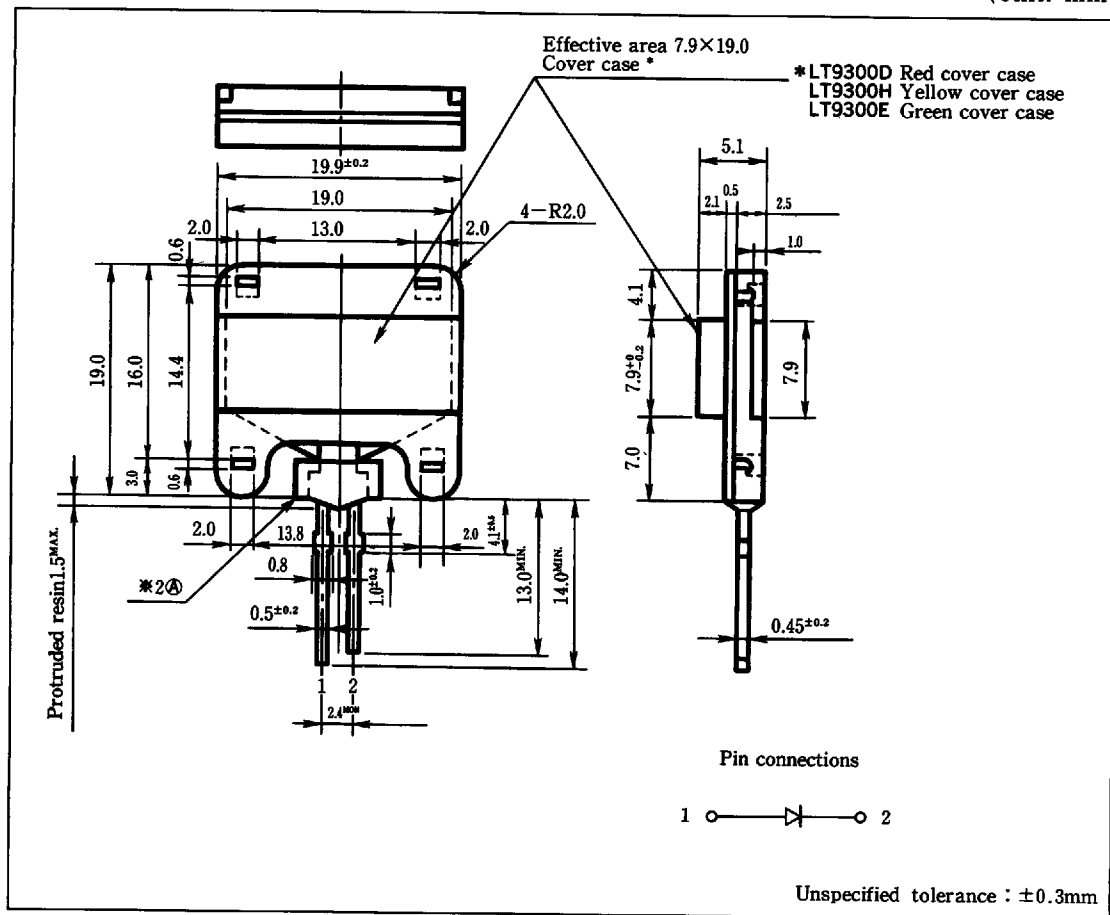
T-41-25

■ Features

1. Radiation size $7.9 \times 19.0\text{mm}$
2. Thin case mold type

■ Outline Dimensions

(Unit: mm)



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LT9300□

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■ Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	LT9300D	LT9300H				Unit
		LT9300E					
Power dissipation	P	84	50				mW
Continuous forward current	I _F	30	20				mA
※1 Peak forward current	I _{FM}	50	50				mA
Derating factor	DC	—	0.55	0.36			mA/°C
	Pulse	—	0.91	0.91			mA/°C
Reverse voltage	V _R	5	5				V
Operating temperature	T _{opr}	-20 to +70					°C
Storage temperature	T _{stg}	-30 to +80					°C
※2 Soldering temperature	T _{sol}	260 (within 5 seconds)					°C

※1 Duty ratio=1/10, Pulse width=0.1ms

※2 At the position of 4.1 mm from ④ level of outline dimensions

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LT9300D (Red)

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■ Electro-optical Characteristics

(Ta = 25°C)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	LT9300D	$I_F = 20\text{mA}$	—	2.0	2.8	V
※3 Luminous intensity	I_V	LT9300D	$I_F = 20\text{mA}$	1.0	2.0	—	mcd
Peak emission wavelength	λ_p	LT9300D	$I_F = 20\text{mA}$	—	635	—	nm
Spectrum radiation bandwidth	$\Delta\lambda$	LT9300D	$I_F = 20\text{mA}$	—	35	—	nm
Reverse current	I_R	LT9300D	$V_R = 4\text{V}$	—	—	10	μA
Response frequency	f_c	LT9300D	—	—	4	—	MHz

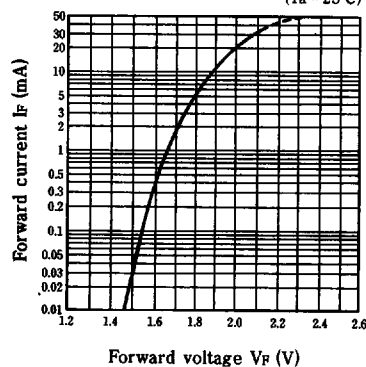
※3 Effective area : $7.9 \times 19.0\text{mm}$
Tolerance $\pm 30\%$

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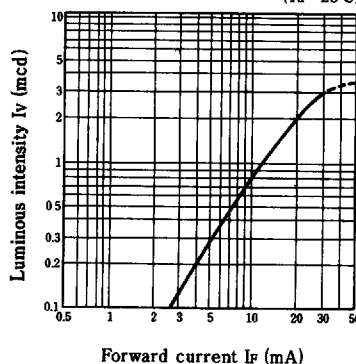
■ Characteristics Diagrams

Forward Current vs.
Forward Voltage

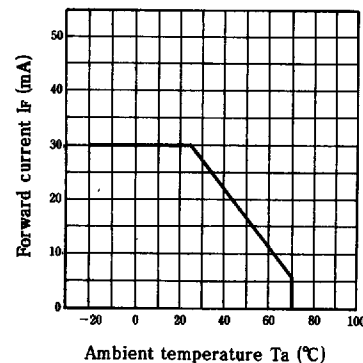
(Ta = 25°C)

Luminous Intensity vs.
Forward Current

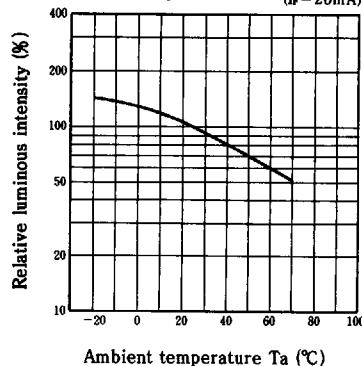
(Ta = 25°C)



Forward Current Derating Curve

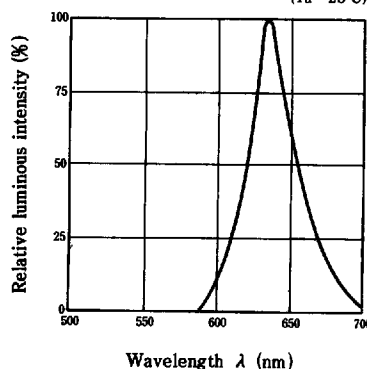
Relative Luminous Intensity vs.
Ambient Temperature

(If = 20mA)



Spectrum Distribution

(Ta = 25°C)



SHARP

S1E D ■ 818079A 0007272 70T ■ SRPJ

LT9300H (Yellow) / LT9300E (Yellow-green)

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■ Electro-optical Characteristics

(Ta = 25°C)

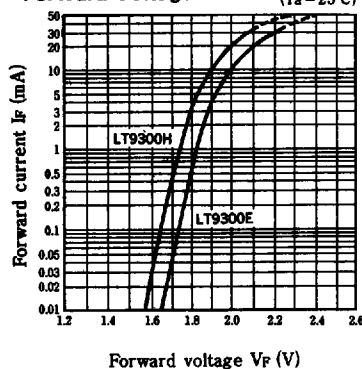
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	LT9300H	$I_F = 10\text{mA}$	—	1.9	2.5	V
		LT9300E	$I_F = 20\text{mA}$	—	2.1	2.8	
※3 Luminous intensity	I_v	LT9300H	$I_F = 10\text{mA}$	0.2	0.7	—	mcd
		LT9300E	$I_F = 20\text{mA}$	1.5	3.0	—	
Peak emission wavelength	λ_p	LT9300H	$I_F = 10\text{mA}$	—	585	—	nm
		LT9300E	$I_F = 20\text{mA}$	—	565	—	
Spectrum radiation bandwidth	$\Delta\lambda$	LT9300H	$I_F = 10\text{mA}$	—	30	—	nm
		LT9300E	$I_F = 20\text{mA}$	—	30	—	
Reverse current	I_R	LT9300H	$V_R = 4\text{V}$	—	—	10	μA
		LT9300E	$V_R = 4\text{V}$	—	—	10	
Response frequency	f_c	LT9300H	—	—	4	—	MHz
		LT9300E	—	—	4	—	

※3 Effective area : $7.9 \times 19.0\text{mm}$
Tolerance $\pm 30\%$

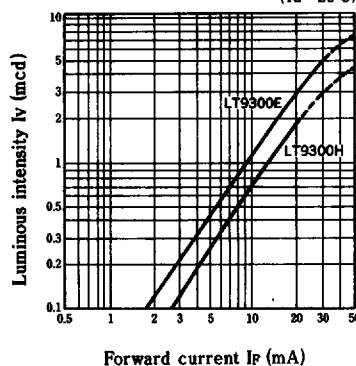
■ Characteristics Diagrams

Forward Current vs.
Forward Voltage

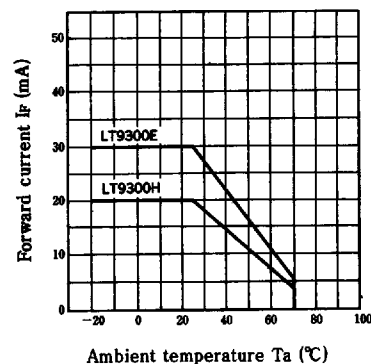
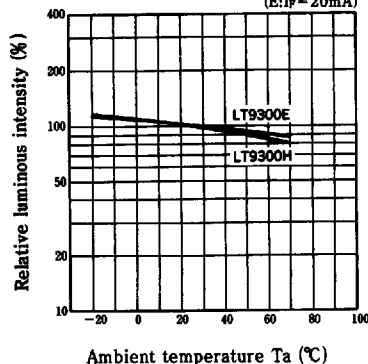
(Ta = 25°C)

Luminous Intensity vs.
Forward Current

(Ta = 25°C)

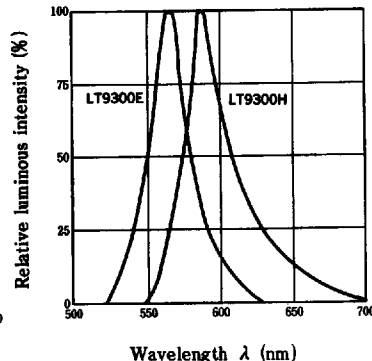


Forward Current Derating Curve

Relative Luminous Intensity vs.
Ambient Temperature(H: $I_F = 10\text{mA}$
E: $I_F = 20\text{mA}$)

Spectrum Distribution

(Ta = 25°C)

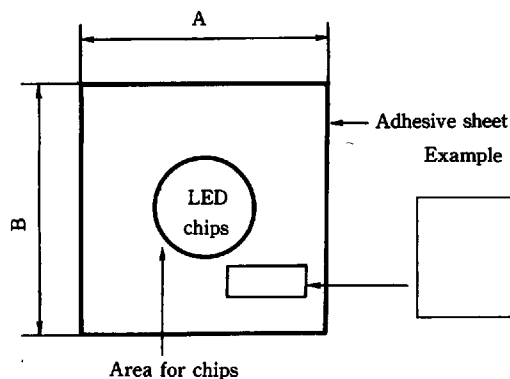


Packing Specifications for LED Chips

T-90-20

1. Chip Packing

The chips are pasted up on the center of an adhesive sheet, then covered with a protective sheet.



Example

Model No. chip packing classification No.

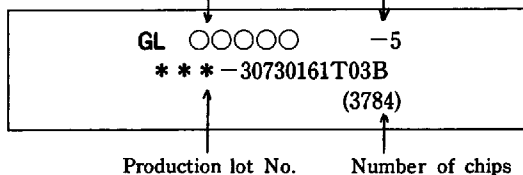


Fig. 1

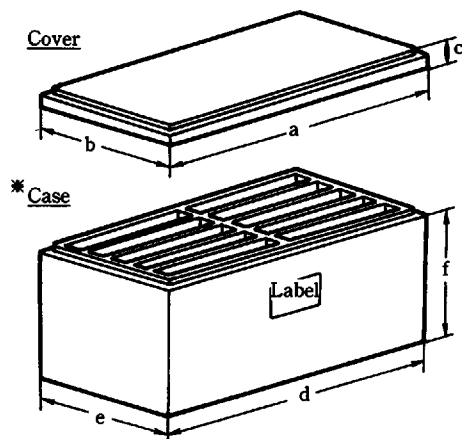
2. Sheet Packing

PART No.	
QUANTITY	00 pcs. (UNITS)
ID No.	
SHARP CORPORATION	

Put the chip-pasted sheet into a dedicated styrol case, then paste up a label shown in Fig. 2 on its side.

Fig. 2

3. Styrol Case



*Divided into 10 divisions

Fig. 3

LED Chips

SHARP CORP

Packing Specifications

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(Unit : mm)

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Adhesive sheet size A × B	Cover			Case			1 division		
	a	b	c	d	e	f	Length	Width	Depth
110×110	265	170	22.5	265	170	125	115	22.5	115
150×150	350	170	22.5	350	170	165	155	22.5	155
180×180	465	200	22.5	465	200	220	205	25	205
200×200	465	200	22.5	465	200	220	205	25	205

As to details such as materials, colors and paste intensity of chip-pasted sheets, etc., please contact our sales department.