

# LT9562U

## ∅ 10mm Cylinder Type LED Lamp

### ■ Model No.

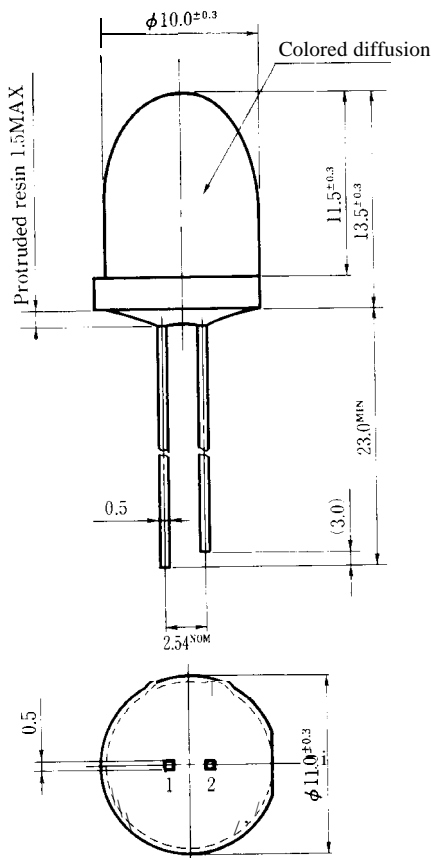
LT9562U Red (Super-luminosity) GaAlAs/GaAlAs

### ■ Features

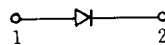
1. ∅ 10mm all resin mold
2. Super-luminosity red LED lamp
3. Colored diffusion lens type

### ■ Outline Dimensions

(Unit: mm)



Pin connections



Unspecified tolerance :  $\pm 0.2$  mm

**SHARP**

## LT9562U

## ■ Absolute Maximum Ratings

(Ta = 25°C)

Parameter	Symbol	LT9562U					Unit	
Power dissipation	P	75					mW	
Continuous forward current	I <sub>F</sub>	30					mA	
*1 Peak forward current	I <sub>FM</sub>	50					mA	
Derating factor	DC	-	040				mA/°C	
	Pulse		0.67				mA/°C	
Reverse voltage	V <sub>R</sub>	4					v	
Operating temperature	T <sub>opr</sub>	-25 to +85						°C
Storage temperature	T <sub>stg</sub>	-25 to +100						°C
*2 Soldering temperature	T <sub>sol</sub>	260(within 5 seconds)						°C

\*1 Duty ratio = 1/10 , Pulse width = 0.1ms

\*2 At the position of 1.6mm from the bottom face of resin package

LT9562U (Red)

■ Electro-optical Characteristics

(Ta = 25°C)

Parameter	Symbol	Model No	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	$V_F$	LT9562U	$I_F = 20\text{mA}$	—	1.85	2.5	V
※3 Luminous intensity	$I_v$	LT9562U	$I_F = 20\text{mA}$	700	1400	—	mcd
Peak emission wavelength	$\lambda_p$	LT9562U	$I_F = 20\text{mA}$		660	—	nm
Spectrum radiation bandwidth	$\Delta\lambda$	LT9562U	$I_F = 20\text{mA}$		20	—	nm
Reverse current	$I_R$	LT9562U	$V_R = 3\text{V}$	—	—	100	$\mu\text{A}$
Terminal capacitance	$C_t$	LT9562U	$V = 0\text{V}$ $f = 1\text{MHz}$	—	25	—	pF
Response frequency	$f_c$	LT9562U	—		8	—	MHz

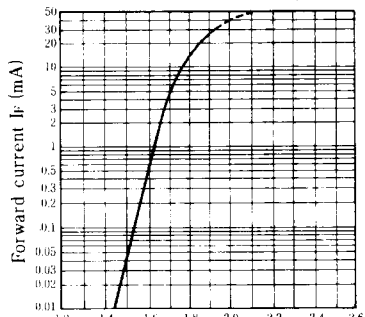
※3 Tolerance:  $\pm 30\%$

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■ Characteristics Diagrams

Forward Current vs. Forward Voltage

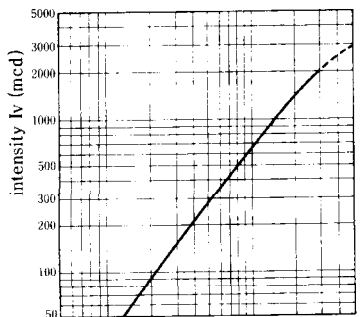
(Ta = 25°C)



Forward voltage  $V_F$  (V)

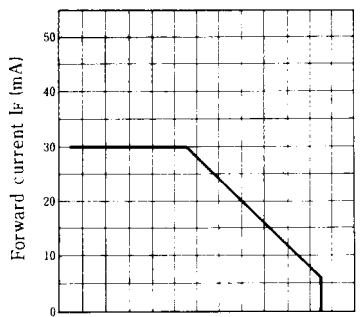
Luminous Intensity vs. Forward Current

(Ta = 25°C)



Forward current  $I_F$  (mA)

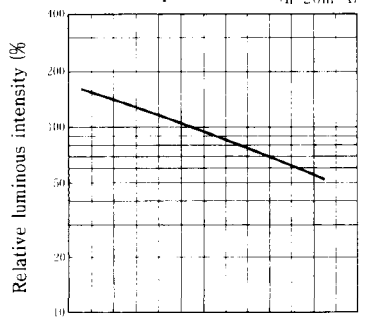
Forward Current Derating Curve



Ambient temperature  $T_a$  (°C)

Relative Luminous Intensity vs. Ambient Temperature

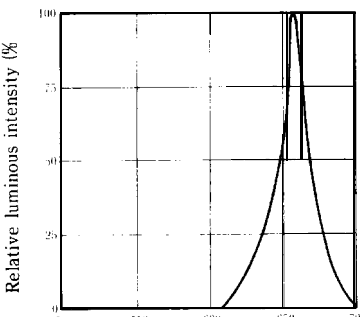
( $I_F = 20\text{mA}$ )



Ambient temperature  $T_a$  (°C)

Spectrum Distribution

(Ta = 25°C)



Wavelength  $\lambda$  (nm)

Radiation Diagram

(Ta = 25°C)

