

LT9552 Series ϕ 7.5mm Cylinder Type LED Lamps

Model No.

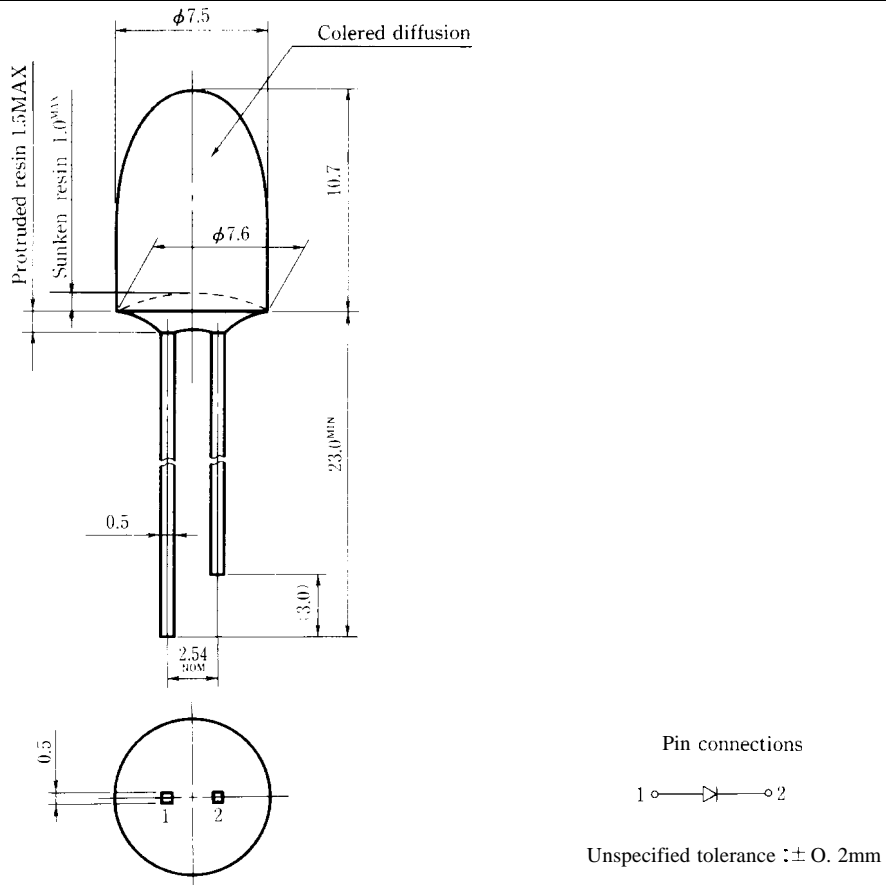
LT9552L Red (High- luminosity) GaAlAs/GaAs
 LT9552E Yellow-green GaP

Features

1. # 7.5mm all resin mold
2. High-density mounting (flangeless package)
3. Colored diffusion lens type

Outline Dimensions

(Unit: mm)



LT9552□

■ Absolute Maximum Ratings

(Ta = 25°C)

Parameter	Symbol	LT9552L	LT9552E			Unit
Power dissipation	P	110	84			mW
Continuous forward current	I _F	50	30			mA
※1 Peak forward current	I _{FM}	300	50			mA
Derating factor	DC	0.67	0.40			mA/°C
	Pulse	4.00	0.67			mA/°C
Reverse voltage	V _R	5	5			v
Operating temperature	T _{opr}	-25 to +85				°C
Storage temperature	T _{stg}	-25 to +100				°C
※2 Soldering temperature	T _{sol}	260(within 5 seconds)				°C

※1 Duty ratio = 1/10 , Pulse width = 0.1ms

Duty ratio = 1/16 , Pulse width ≤ 1ms for LT9552L

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

LT9552L (Red)

■ Electro-optical Characteristics

(Ta = 25°C)

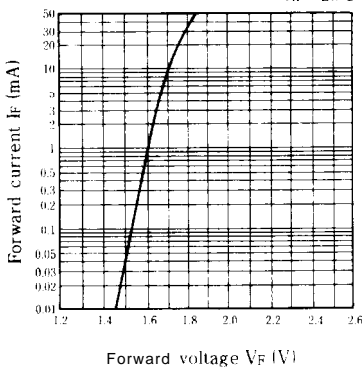
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	LT9552L	$I_F = 20\text{mA}$	—	1.75	2.20	V
*3 Luminous intensity	I_V	LT9552L	$I_F = 20\text{mA}$	80	200	—	mcd
Peak emission wavelength	λ_p	LT9552L	$I_F = 20\text{mA}$	—	660	—	nm
Spectrum radiation bandwidth	$\Delta\lambda$	LT9552L	$I_F = 20\text{mA}$	—	20	—	nm
Reverse current	I_R	LT9552L	$V_R = 4\text{V}$	—	—	10	μA
Terminal capacitance	C_t	LT9552L	$V = 0\text{V } f = 1\text{ MHz}$	—	30	—	pF
Response frequency	f_c	LT9552L	—	—	8	—	MHz

*3 Tolerance: $\pm 30\%$

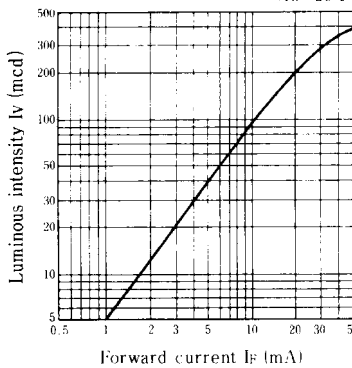
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■ Characteristics Diagrams

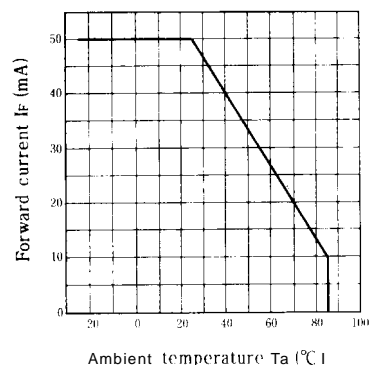
Forward Current vs. Forward Voltage (Ta = 25°C)



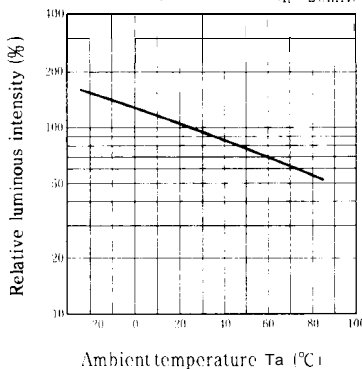
Luminous Intensity vs. Forward Current (Ta = 25°C)



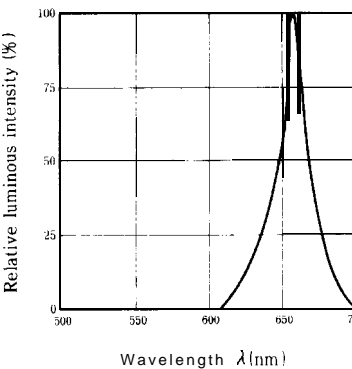
Forward Current Derating Curve



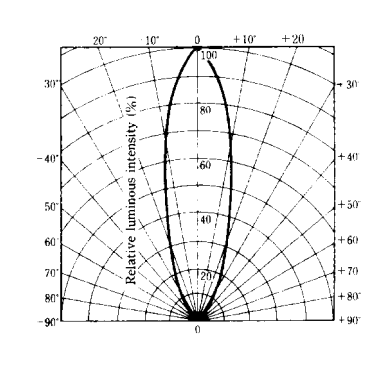
Relative Luminous Intensity vs. Ambient Temperature (If = 20mA)



Spectrum Distribution (Ta = 25°C)



Radiation Diagram (Ta = 25°C)



LT9552E (Yellow-green)

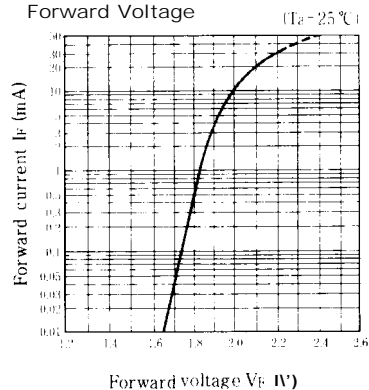
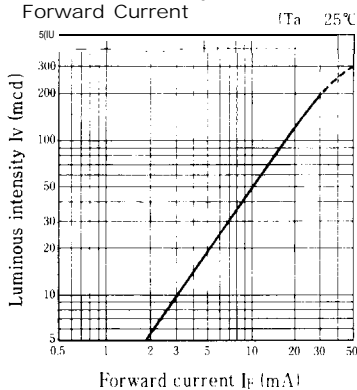
■ Electro-optical Characteristics

(Ta = 25°C)

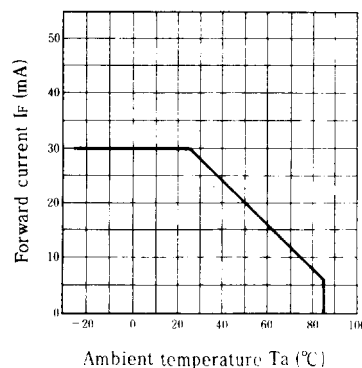
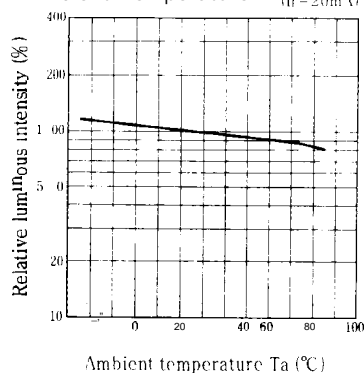
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	LT9552E	$I_F = 20\text{mA}$		2.1	2.8	V
*3 Luminous intensity	I_V	LT9552E	$I_F = 20\text{mA}$	50	120	-	mcd
Peak emission wavelength	λ_p	LT9552E	$I_F = 20\text{mA}$	-	565	-	nm
Spectrum radiation bandwidth	$\Delta\lambda$	LT9552E	$I_F = 20\text{mA}$		30	-	nm
Reverse current	I_R	LT9552E	$V_R = 4\text{V}$		-	10	μA
Terminal capacitance	C_T	LT9552E	$V = 0\text{V}$ $f = 1\text{MHz}$	-	35	-	pF
Response frequency	f_c	LT9552E	-		4	-	MHz

*3 Tolerance $\pm 30\%$

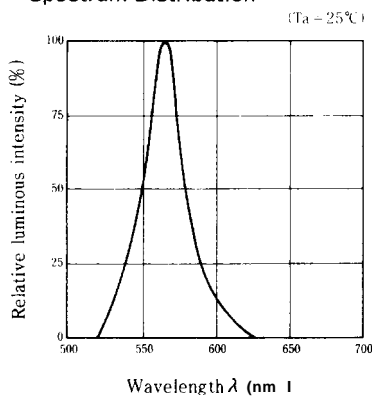
■ Characteristics Diagrams

Forward Current vs.
Forward VoltageLuminous Intensity vs.
Forward Current

Forward Current Derating Curve

Relative Luminous Intensity vs.
Ambient Temperature

Spectrum Distribution



Radiation Diagram

