

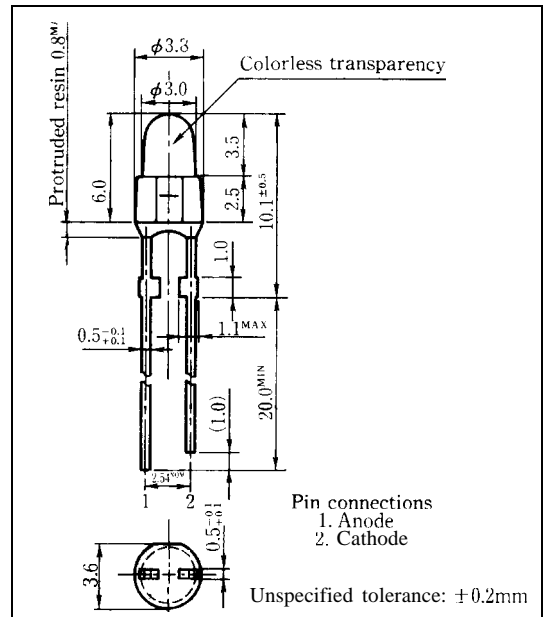
GL3□□21T Series

φ 3mm(T-1) Cylinder Type LED Lamps

■ Model No.

GL3UR21T Red (Super-luminosity) GaAlAs/GaAlAs
 GL3EG21T Yellow-green GaP

■ Outline Dimensions (Unit: mm)



■ Features

1. φ 3mm(T-1) all resin mold
2. Colorless transparency lens type
3. Wide viewing angle

■ Absolute Maximum Ratings

(Ta = 25°C)

Parameter	Symbol	GL3UR21T	GL3EG21T			Unit
Power dissipation	P	75	84			mW
Continuous forward current	I _F	30	30			mA
※1 Peak forward current	I _{FM}	50	50			mA
Derating factor	DC	—	0.40	0.40		mA/°C
	Pulse	—	0.67	0.67		mA/°C
Reverse voltage	V _R	4	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 10 seconds)				°C

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

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



GL3UR21 T (Red)

(Ta=25°C)

■ Electro-optical Characteristics

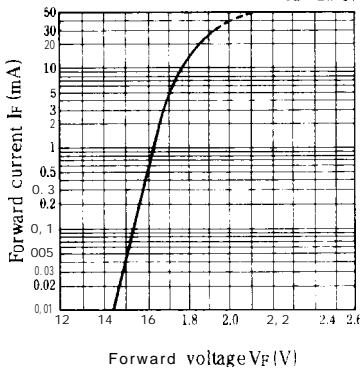
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	GL3UR21 T	$I_F = 20\text{mA}$		1.85	2.5	V
※3 Luminous intensity	I_V	GL3UR21 T	$I_F = 20\text{mA}$	100	200	—	mcd
Peak emission wavelength	λ_p	GL3UR21T	$I_F = 20\text{mA}$		660	—	nm
Spectrum radiation bandwidth	$\Delta \lambda$	GL3UR21T	$I_F = 20\text{mA}$		20	—	nm
Reverse current	I_R	GL3UR21T	$V_R = 3\text{V}$			100	μA
Terminal capacitance	C_t	GL3UR21 T	$V = 0\text{V}, f = 1\text{MHz}$	—	25	—	pF
Response frequency	f_c	GL3UR21 T	—	—	8	—	MHz

※3 Tolerance: $\pm 30\%$

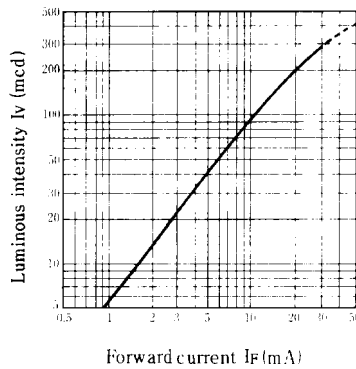
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■ Characteristics Diagrams

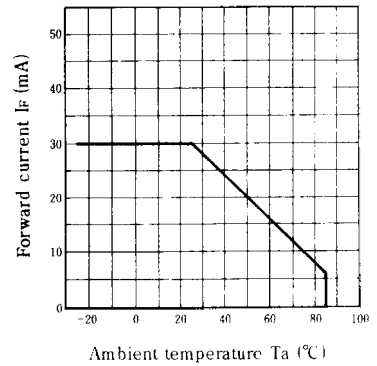
Forward Current vs. Forward Voltage (Ta=25°C)



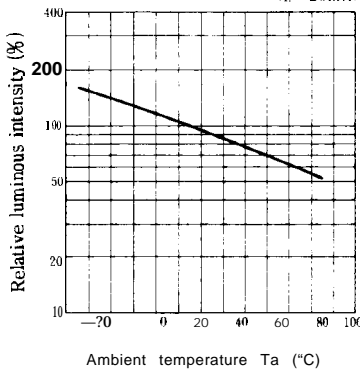
Luminous Intensity vs. Forward Current (Ta=25°C)



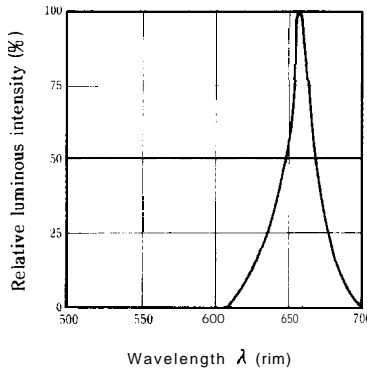
Forward Current Derating Curve



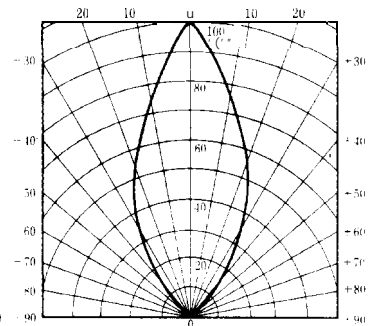
Relative Luminous Intensity vs. Ambient Temperature (If=20mA)



Spectrum Distribution (Ta=25°C)



Radiation Diagram (Ta=25°C)



GL3EG21 T (Yellow-green)

■ Electro-optical Characteristics

(Ta=25°C)

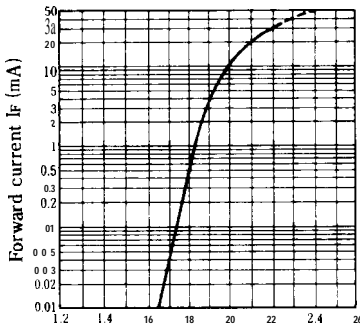
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V _F	GL3EG21T	I _F =20mA	—	2.1	2.8	V
※3 Luminous intensity	I _V	GL3EG21T	I _F =20mA	30	80	—	mcd
Peak emission wavelength	λ _p	GL3EG21T	I _F =20mA	—	565	—	nm
Spectrum radiation bandwidth	Δλ	GL3EG21T	I _F =20mA	—	30	—	nm
Reverse current	I _R	GL3EG21T	V _R =4V	—	—	10	μA
Terminal capacitance	C _t	GL3EG21T	V=0V f=1MHz	—	35	—	pF
Response frequency	f _c	GL3EG21T	—	—	4	—	MHz

※3 Tolerance: ±30%

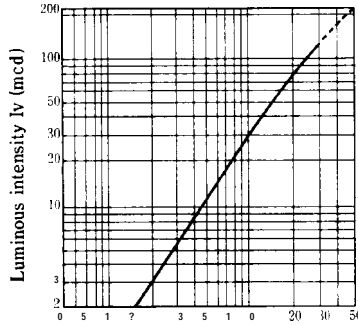
■ Characteristics Diagrams

Forward Current vs.
Forward Voltage

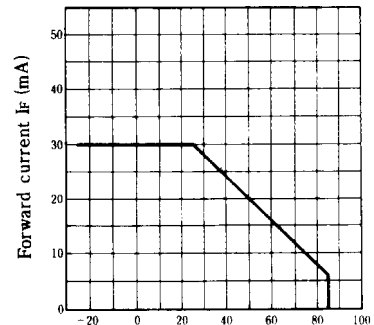
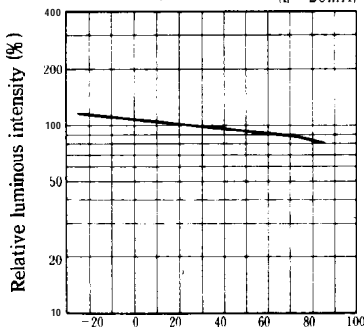
(Ta=25°C)

Forward voltage V_F (V)Luminous Intensity vs.
Forward Current

(Ta=25°C)

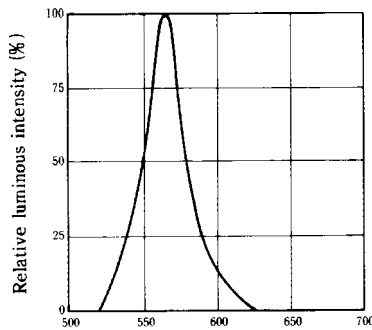
Forward current I_F (mA)

Forward Current Derating Curve

Ambient temperature T_a (°C)Relative Luminous Intensity vs.
Ambient Temperature(I_F=20mA)Ambient temperature T_a (°C)

Spectrum Distribution

(Ta=25°C)



Wavelength λ (nm)

Radiation Diagram

(Ta=25°C)

