

GL5UR2K/ GL5UR2K1

■ Model No.

GL5UR2K Red (Super-luminosity) GaAlAs/GaAlAs
GL5UR2K1 Red (Super-luminosity) GaAlAs/GaAlAs

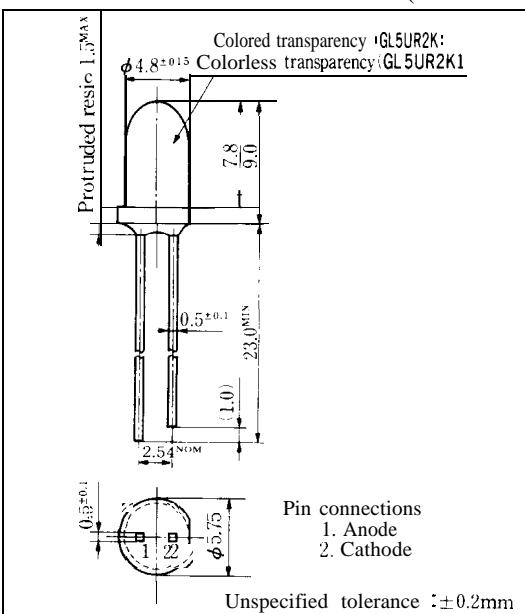
■ Features

1. $\phi 5\text{mm}(\text{T-1}\frac{3}{4})$ all resin mold
2. Red colored transparency lens type (GL5UR2K)
Colorless transparency lens type (GL5UR2K1)

$\phi 5\text{mm}(\text{T-1}\frac{3}{4})$ Cylinder Type LED Lamps

■ Outline Dimensions

(Unit: mm)

Unspecified tolerance : $\pm 0.2\text{mm}$

■ Absolute Maximum Ratings

(Ta = 25°C)

Parameter	Symbol	GL5UR2K					Unit
		GL5UR2K1					
Power dissipation	P	75					mW
Continuous forward current	I _F	30					mA
*1 Peak forward current	I _{FM}	50					mA
Derating factor	DC	—	0.40				mA/°C
	Pulse	—	0.67				m A/°C
Reverse voltage	V _R	4					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

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

SHARP

GL5UR2K (Red) /GL5UR2KI (Red)

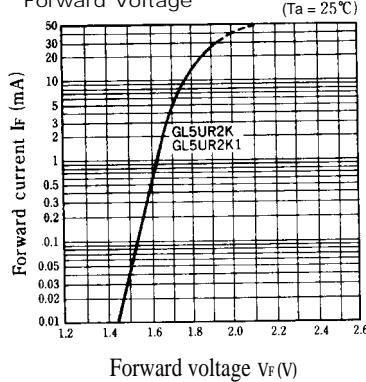
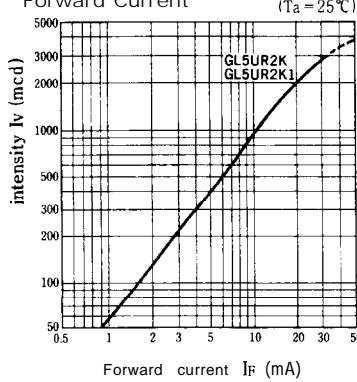
■ Electro-optical Characteristics

(Ta=25°C)

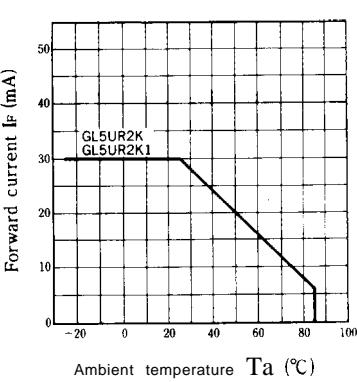
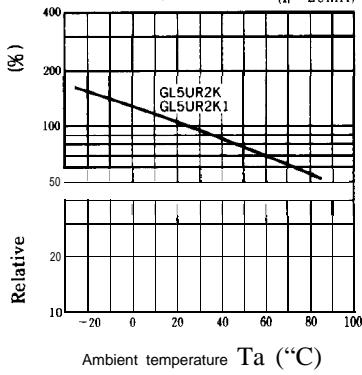
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	GL5UR2K	$I_F = 20\text{mA}$	—	1.85	2.50	V
		GL5UR2KI	$I_F = 20\text{mA}$	—	1.85	2.50	
※3 Luminous intensity	I_V	GL5UR2K	$I_F = 20\text{mA}$	1400	2000	—	mcd
		GL5UR2KI	$I_F = 20\text{mA}$	1400	2000	—	
Peak emission wavelength	λ_p	GL5UR2K	$I_F = 20\text{mA}$	—	660	—	‘m
		GL5UR2KI	$I_F = 20\text{mA}$	—	660	—	
Spectrum radiation bandwidth	$\Delta \lambda$	GL5UR2K	$I_F = 20\text{mA}$	—	20	—	‘m
		GL5UR2KI	$I_F = 20\text{mA}$	—	20	—	
Reverse current	I_R	GL5UR2K	$V_R = 3\text{V}$	—	—	100	μA
		GL5UR2KI	$V_R = 3\text{V}$	—	—	100	
Terminal capacitance	C_t	GL5UR2K	$V=OV$ $f=1\text{MHz}$	—	25	—	pF
		GL5UR2KI	$V=OV$ $f=1\text{MHz}$	—	25	—	
Response frequency	f_c	GL5UR2K	—	—	8	—	MHz
		GL5UR2KI	—	—	8	—	

※3 Tolerance: ±30%

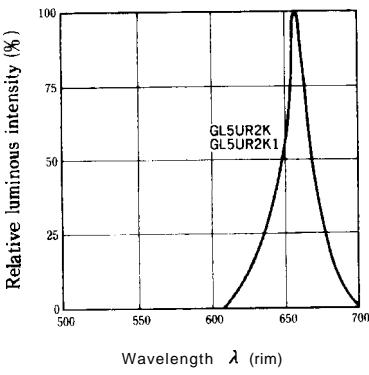
■ Characteristics Diagrams

Forward Current vs.
Forward VoltageLuminous Intensity vs.
Forward Current

Forward Current Derating Curve

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

Spectrum Distribution



Radiation Diagram

