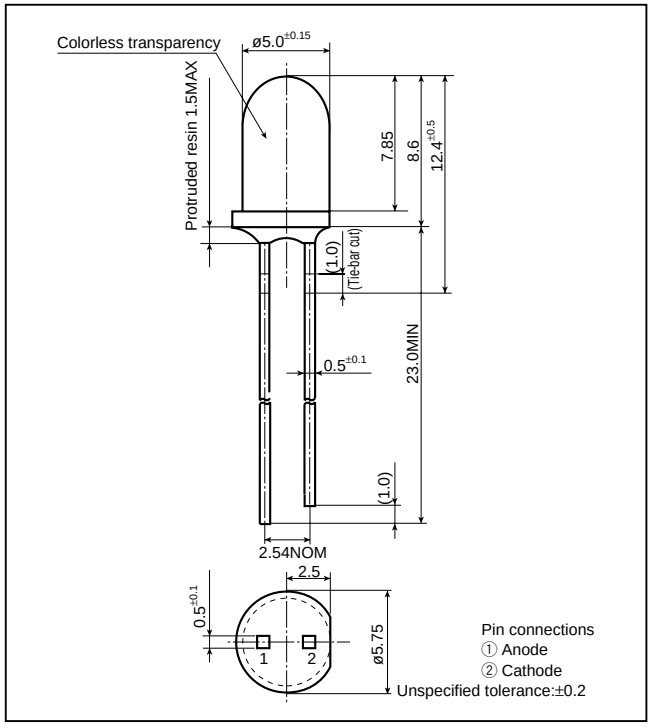
GL5❑❑44 series

ø5mm(T-1 3/4), Cylinder Type, Colorless Transparency, High-luminosity LED Lamps for Outdoor Use

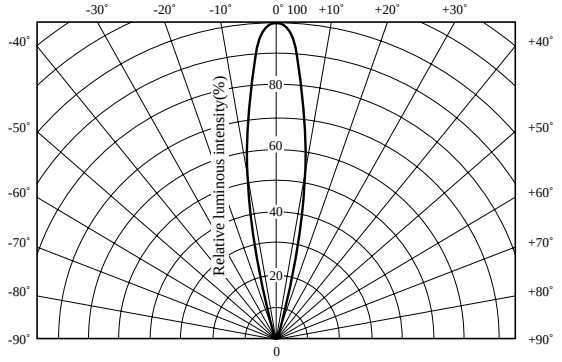
■ Outline Dimensions

(Unit : mm)



■ Directive Characteristics

(Ta=25˚C)



■ Absolute Maximum Ratings

(Ta=25˚C)

Model No.	Emitting color	Material	Power dissipation P (mW)	Forward current IF (mA)	Peak forward current IFM (mA)	Derating factor (mA/˚C)		Reverse voltage VR (V)	Operating temperature Topr (˚C)	Storage temperature Tstg (˚C)	Soldering temperature Tsol*3 (˚C)
						DC	Pulse				
GL5UR44	Red(Super-luminosity)	GaAlAs on GaAlAs	75	30	50*1	0.40	0.67	4	-25 to +85	-25 to +100	260
GL5TR44	Red(High-luminosity)	GaAlAs on GaAs	110	50	300*2	0.67	4.00	5	-25 to +85	-25 to +100	260

*1 Duty ratio=1/10, Pulse width=0.1ms
*2 Duty ratio=1/16, Pulse width≤1ms
*3 5s or less(At the position of 1.6mm or more from the bottom face of resin package)

■ Electro-optical Characteristics

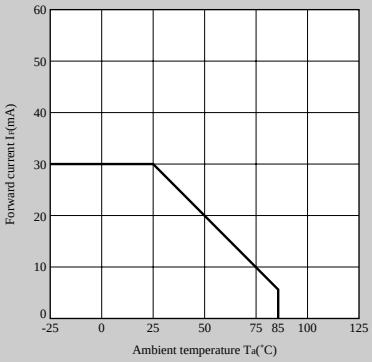
(Ta=25˚C)

Lens type	Model No.	Forward voltage VF(V)		Peak emission wavelength		Luminous intensity		Spectrum radiation bandwidth		Reverse current		Terminal capacitance		Page for characteristics diagrams
		TYP	MAX	λp(nm) TYP	IF (mA)	Iv(mcd) TYP	IF (mA)	Δλ(nm) TYP	IF (mA)	IR(μA) MAX	VR (V)	Ct(pF) TYP	(MHz)	
Colorless transparency	GL5UR44	1.85	2.5	660	20	850	20	20	20	100	3	25	1	99
	GL5TR44	1.75	2.2	660	20	100	20	20	20	10	4	30	1	99

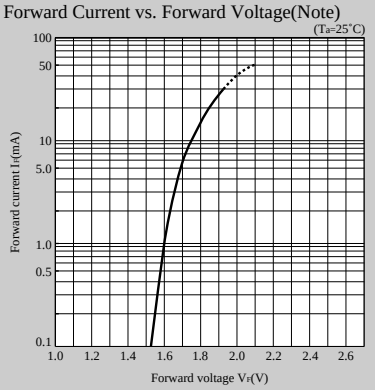
Characteristics Diagrams

UR,U series

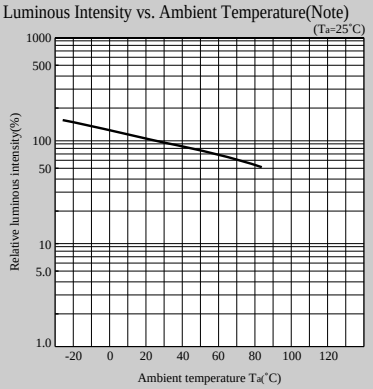
Forward Current Derating Curve



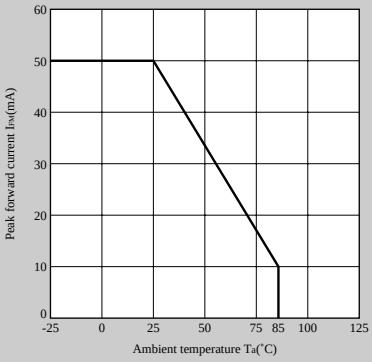
Forward Current vs. Forward Voltage(Note)



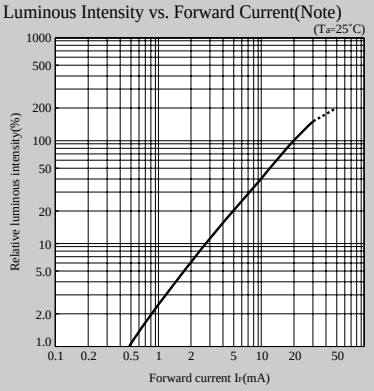
Luminous Intensity vs. Ambient Temperature(Note)



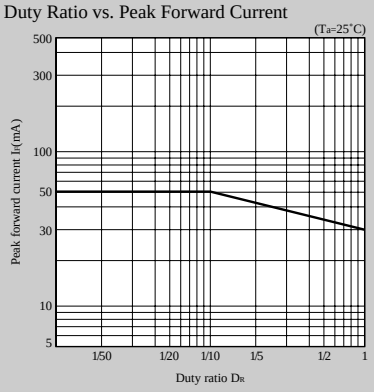
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

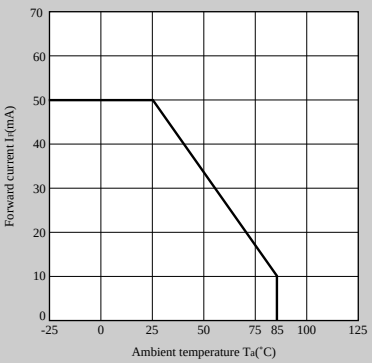


Duty Ratio vs. Peak Forward Current

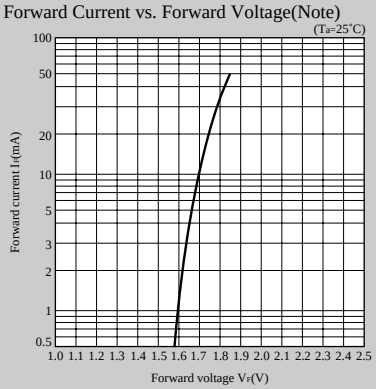


TR,T series

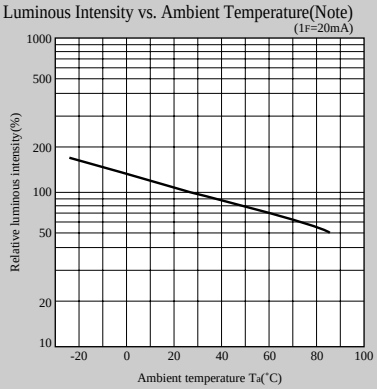
Forward Current Derating Curve



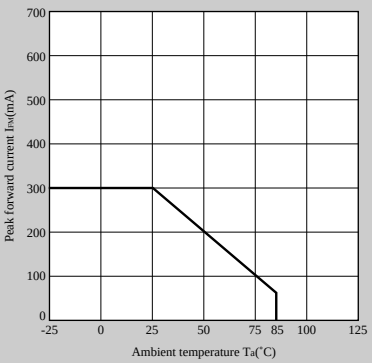
Forward Current vs. Forward Voltage(Note)



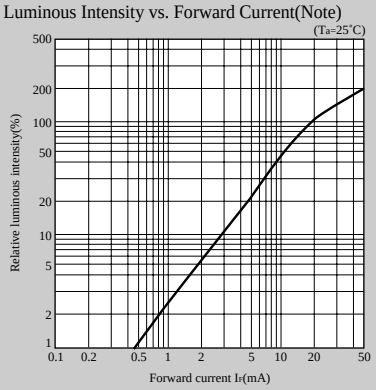
Luminous Intensity vs. Ambient Temperature(Note)



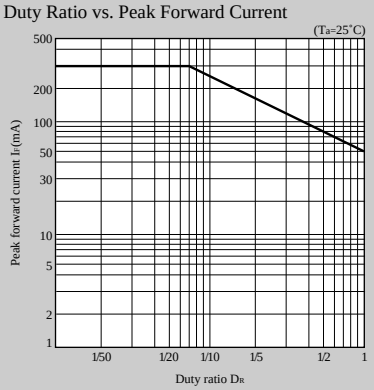
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



Note)Characteristics shown in diagrams are typical values. (not assurance value)

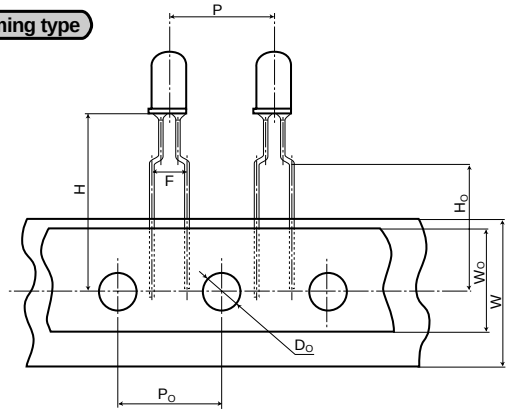
Taping Specifications

■ General Description

Sharp can supply tape-packaged LED lamps for automatic mounting. They will contribute to the high-efficiency mounting, high-precision, power saving. Please confirm before use because some products are not available in taping package.

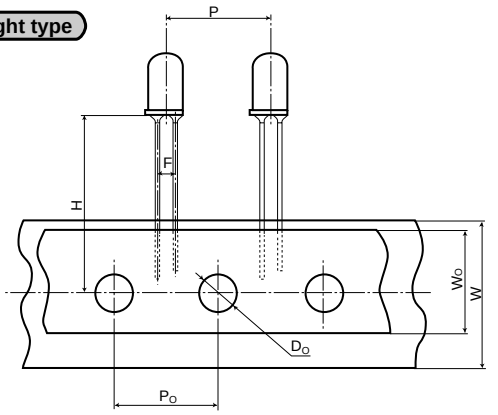
■ Taping specification(Unit : mm, TYP. value)

Forming type



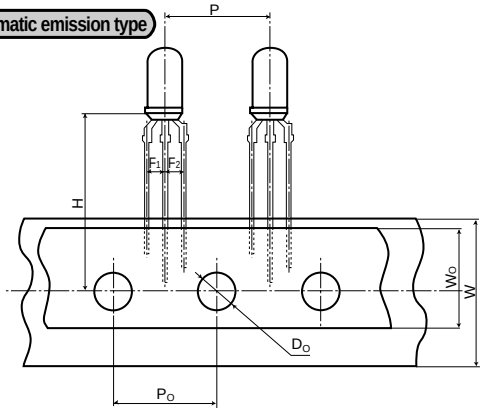
Parameter	Symbol	A	B	D
Case end height	H	23.35	19.5	21.5
Lead clinch height	H_O	16.0		
Tape width	W	18.0		
Adhesive tape width	W_O	13.0		
Product pitch	P	12.7		
Sprocket hole pitch	P_O	12.7		
Lead pitch	F	5.0		
Sprocket hole diameter	D_O	ø4.0		

Straight type



Parameter	Symbol	P	W
Case end height	H	18.0	23.35
Lead clinch height	H_O	—	
Tape width	W	18.0	
Adhesive tape width	W_O	13.0	
Product pitch	P	12.7	
Sprocket hole pitch	P_O	12.7	
Lead pitch	F	2.54	
Sprocket hole diameter	D_O	ø4.0	

Dichromatic emission type



Parameter	Symbol	Size (mm)
Case end height	H	19.5
Lead clinch height	H_O	—
Tape width	W	18.0
Adhesive tape width	W_O	13.0
Product pitch	P	12.7
Sprocket hole pitch	P_O	12.7
Lead pitch	F_1 , F_2	2.54
Sprocket hole diameter	D_O	ø4.0

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— Audio visual equipment
— Consumer electronics

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— Gas leakage sensor breakers
— Alarm equipment
— Various safety devices, etc.

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