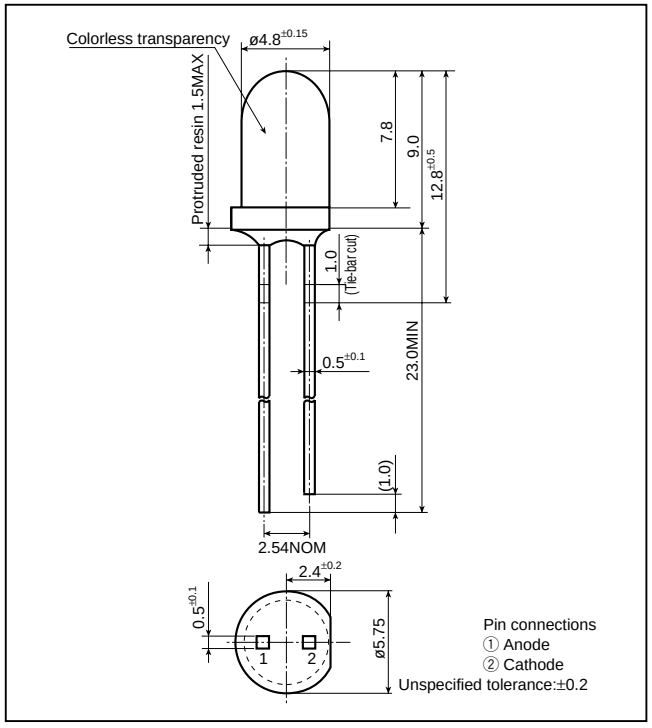
GL5❑❑43 series

ø5mm(T-1 3/4), Cylinder Type, Colorless Transparency LED Lamps for Indicator

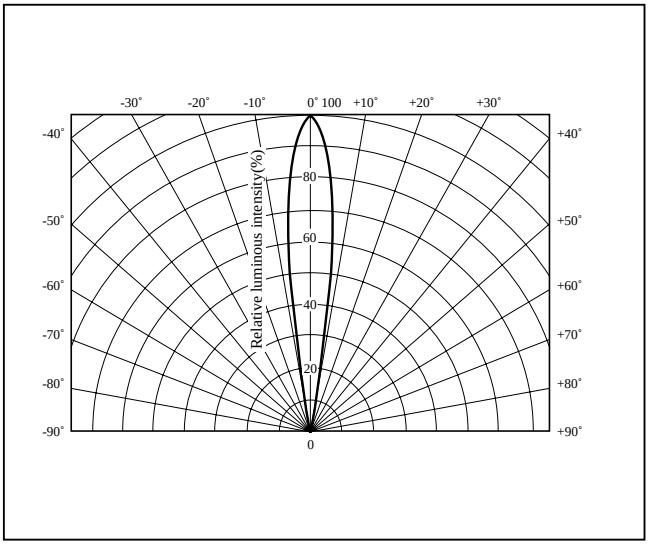
■ Outline Dimensions

(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*1 (mA)	Derating factor (mA/˚C)		Reverse voltage VR (V)	Operating temperature Topr (˚C)	Storage temperature Tstg (˚C)	Soldering temperature Tsol*2 (˚C)
						DC	Pulse				
GL5HD43	Red	GaAsP on GAP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL5HS43	Sunset orange	GaAsP on GAP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL5HY43	Yellow	GaAsP on GAP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL5EG43	Yellow-green	GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL5KG43	Green	GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260

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

*2 5s or less(At the position of 1.6mm or more from the bottom face of resin package)

■ Electro-optical Characteristics

(Ta=25˚C)

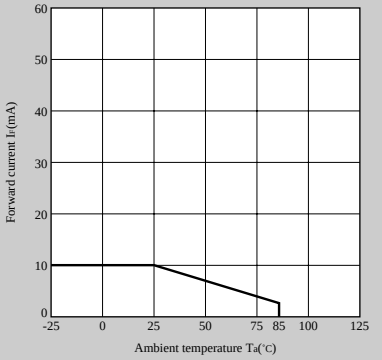
Lens type	Model No.	Forward voltage VF(V)		Peak emission wavelength		Luminous intensity		Spectrum radiation bandwidth		Reverse current		Terminal capacitance		Page for characteristics diagrams
		TYP	MAX	λp(nm) TYP	IF (mA)	Iv(mcd) TYP	IF (mA)	Δλ(nm) TYP	IF (mA)	IR(μA) MAX	VR (V)	Ct(pF) TYP	(MHz)	
Colorless transparency	GL5HD43	2.0	2.8	635	20	300	20	35	20	10	4	20	1	100
	GL5HS43	2.0	2.8	610	20	250	20	35	20	10	4	15	1	100
	GL5HY43	2.0	2.8	585	20	250	20	30	20	10	4	35	1	101
	GL5EG43	2.1	2.8	565	20	300	20	30	20	10	4	35	1	102
	GL5KG43	2.1	2.8	555	20	120	20	30	20	10	4	35	1	102

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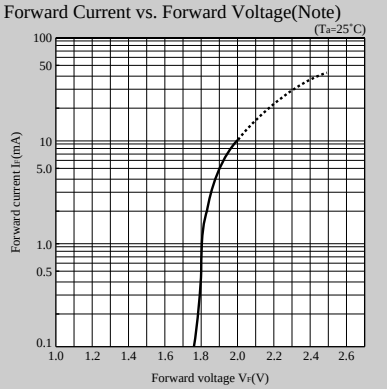
Characteristics Diagrams

PR,P series

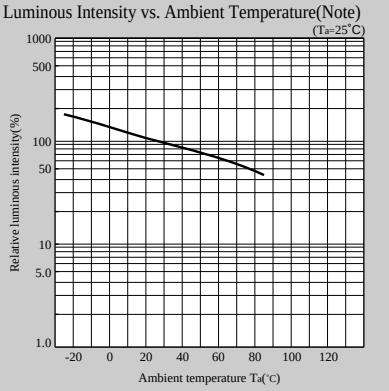
Forward Current Derating Curve



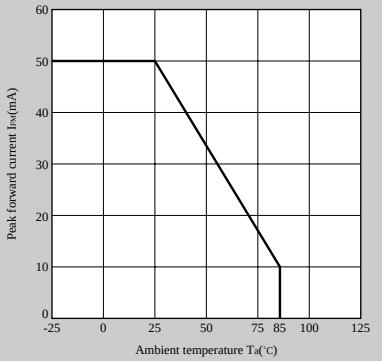
Forward Current vs. Forward Voltage(Note)



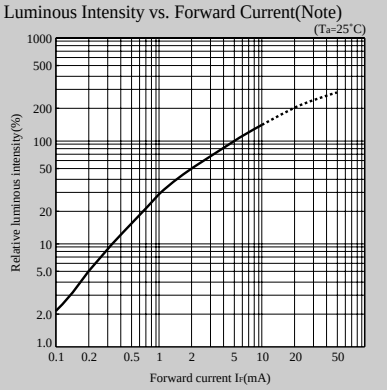
Luminous Intensity vs. Ambient Temperature(Note)



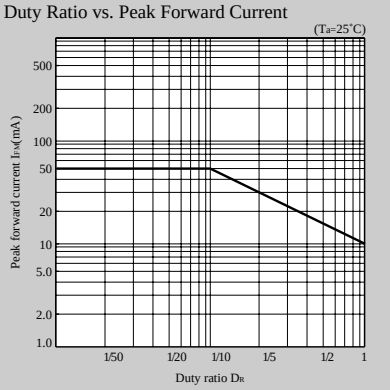
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

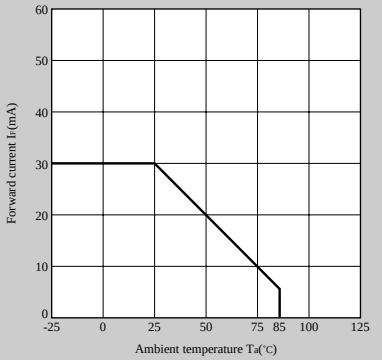


Duty Ratio vs. Peak Forward Current

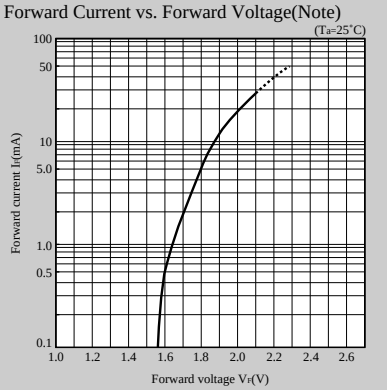


HD,D series

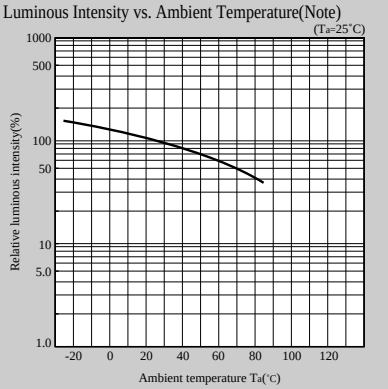
Forward Current Derating Curve



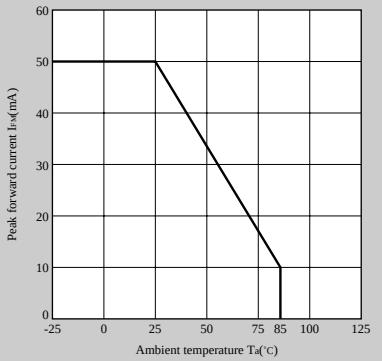
Forward Current vs. Forward Voltage(Note)



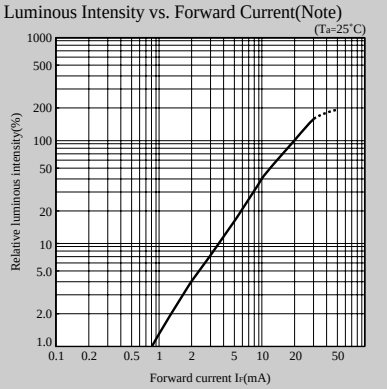
Luminous Intensity vs. Ambient Temperature(Note)



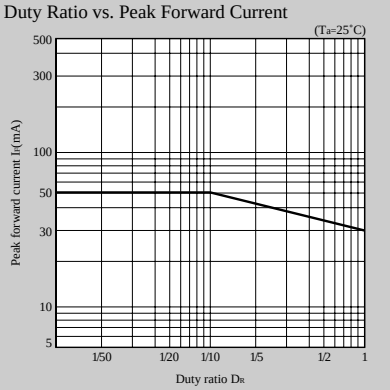
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



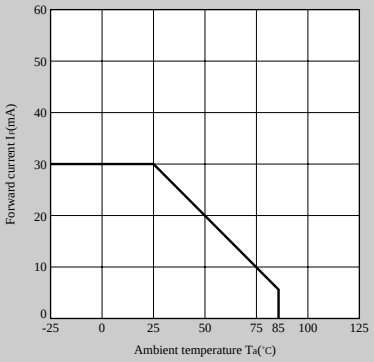
Note)Characteristics shown in diagrams are typical values. (not assurance value)

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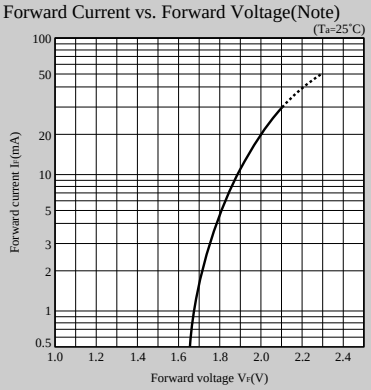
Characteristics Diagrams

HS,S series

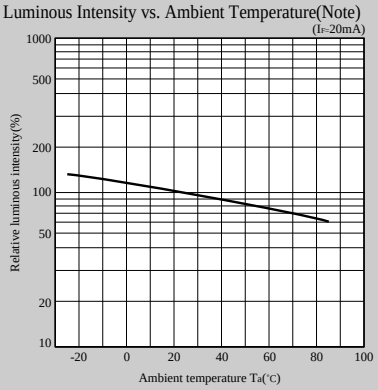
Forward Current Derating Curve



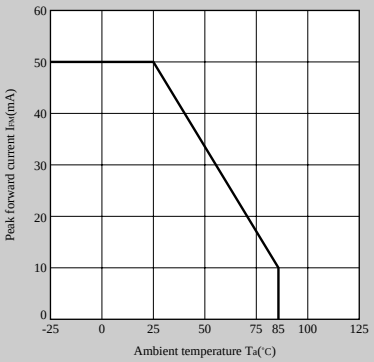
Forward Current vs. Forward Voltage(Note)



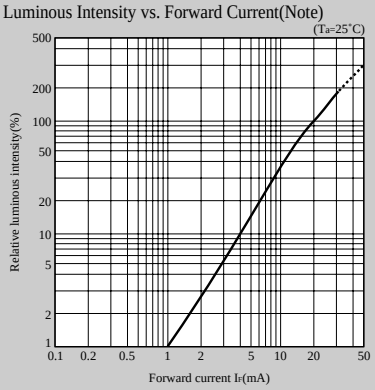
Luminous Intensity vs. Ambient Temperature(Note)



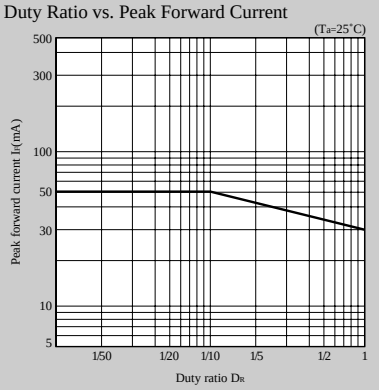
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

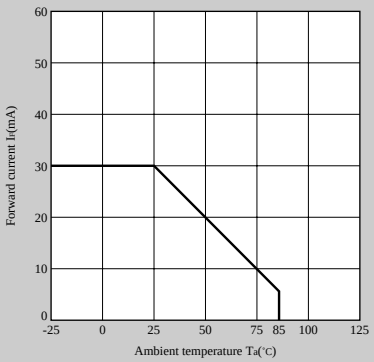


Duty Ratio vs. Peak Forward Current

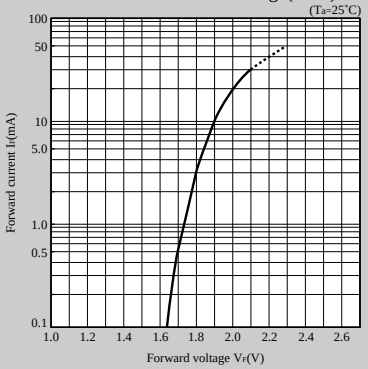


HY,H series

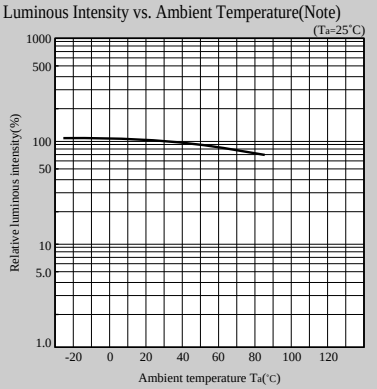
Forward Current Derating Curve



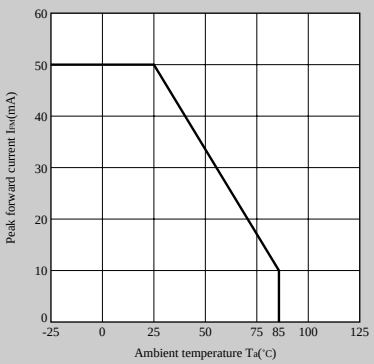
Forward Current vs. Forward Voltage(Note)



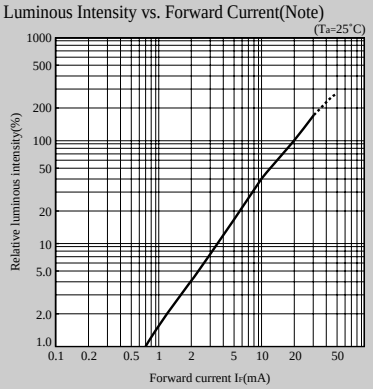
Luminous Intensity vs. Ambient Temperature(Note)



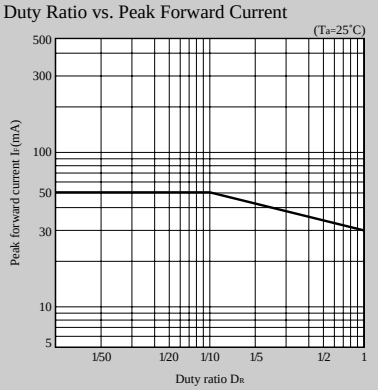
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



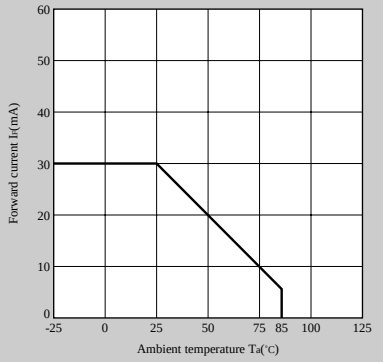
Note)Characteristics shown in diagrams are typical values. (not assurance value)

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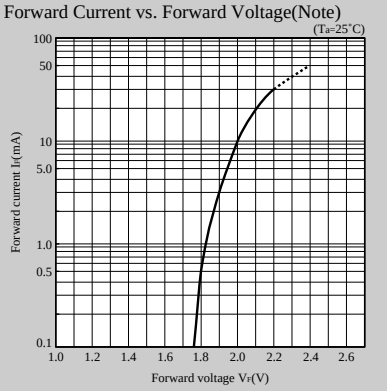
Characteristics Diagrams

EG,E,F,C series

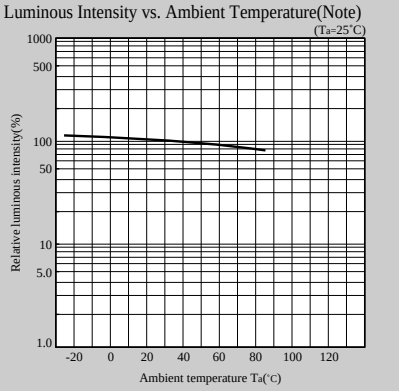
Forward Current Derating Curve



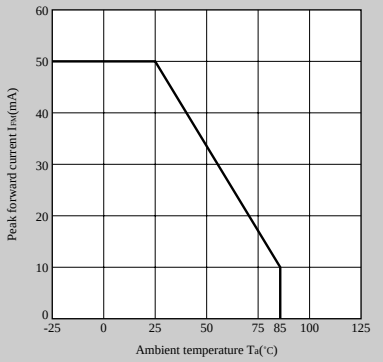
Forward Current vs. Forward Voltage(Note)



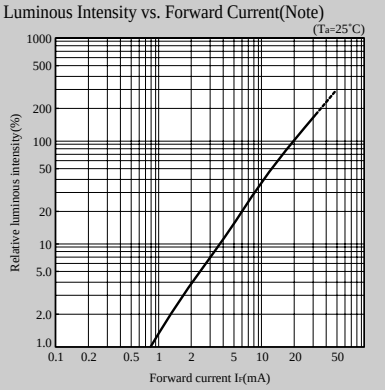
Luminous Intensity vs. Ambient Temperature(Note)



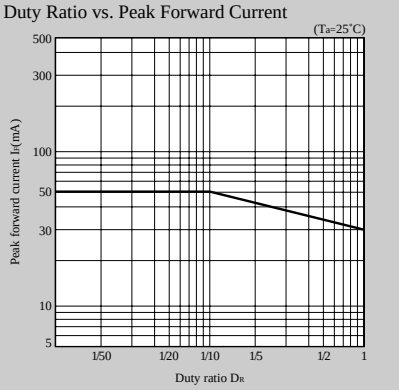
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

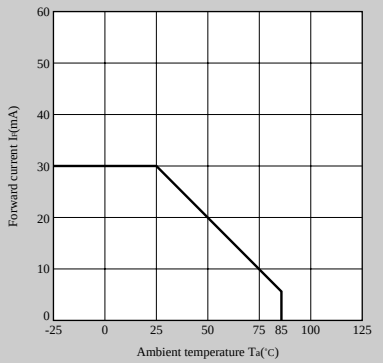


Duty Ratio vs. Peak Forward Current

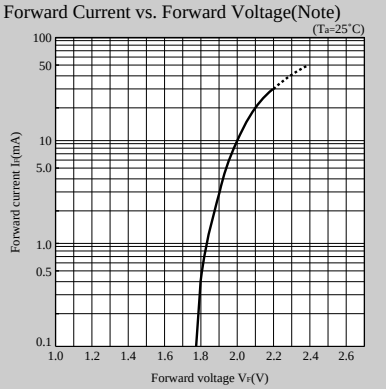


KG,K series

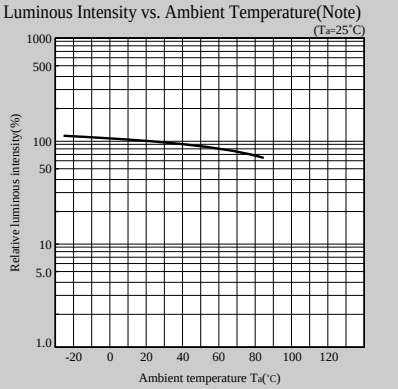
Forward Current Derating Curve



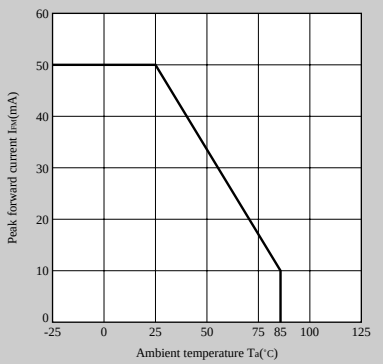
Forward Current vs. Forward Voltage(Note)



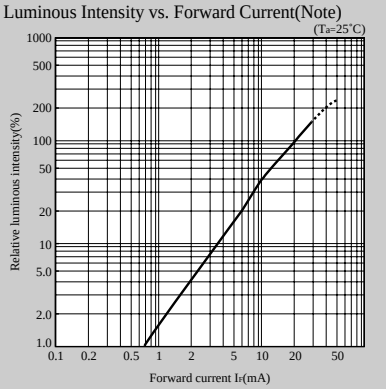
Luminous Intensity vs. Ambient Temperature(Note)



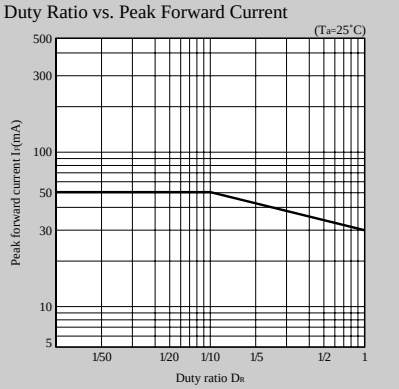
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



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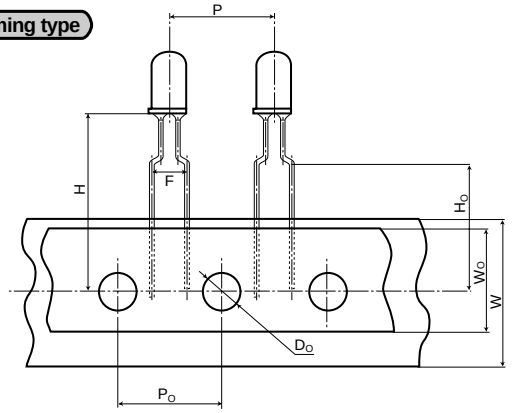
Taping Specifications

■ 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.

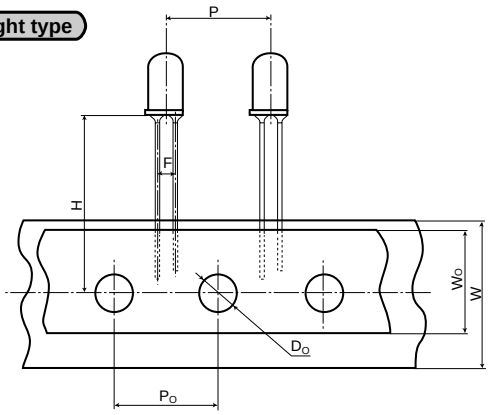
■ Taping specification(Unit : mm, TYP. value)

Forming type



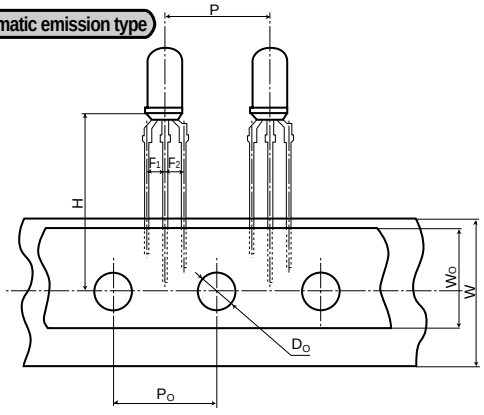
Parameter	Symbol	A	B	D
Case end height	H	23.35	19.5	21.5
Lead clinch height	H_O	16.0		
Tape width	W	18.0		
Adhesive tape width	W_O	13.0		
Product pitch	P	12.7		
Sprocket hole pitch	P_O	12.7		
Lead pitch	F	5.0		
Sprocket hole diameter	D_O	ø4.0		

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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(i) The devices in this publication are designed for use in general electronic equipment designs such as:
— Personal computers
— Office automation equipment
— Telecommunication equipment [terminal]
— Test and measurement equipment
— Industrial control
— Audio visual equipment
— Consumer electronics

(ii) Measures such as fail-safe function and redundant design should be taken to ensure reliability and safety when SHARP devices are used for or in connection with equipment that requires higher reliability such as:
— Transportation control and safety equipment (i.e., aircraft, trains, automobiles, etc.)
— Traffic signals
— Gas leakage sensor breakers
— Alarm equipment
— Various safety devices, etc.

(iii) SHARP devices shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as:
— Space applications
— Telecommunication equipment [trunk lines]
— Nuclear power control equipment
— Medical and other life support equipment (e.g., scuba).

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