

GL1 05011 Series

5-Dots Array LED

■ Model No.

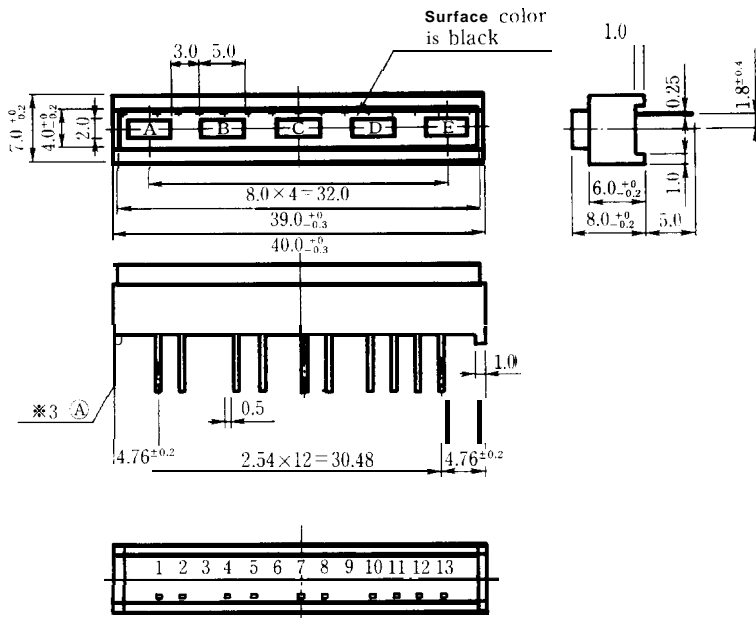
- GL105R11 Red GaP
- GL105H1 1 Yellow GaAsP/GaP

■ Features

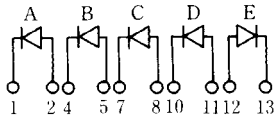
1. Radiation shape per dots 2.0 x 5.0mm
2. Outline dimensions 7.0 x 40.0mm
3. 5 dots case mold type

■ Outline Dimensions

(Unit: mm)



Internal connection diagram



Unspecified tolerance : ±0.38mm

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GL105D11

■ Absolute Maximum Ratings *1

(Ta =25°C)

Parameter	Symbol	GL105R11	GL105H11				Unit
Power dissipation	P	25	50				mW
Continuous forward current	I _F	10	20				mA
*2 Peak forward current	I _{FM}	50	50				mA
Derating factor	DC	—	0.18	0.36			mA/°C
	Pulse	—	0.91	0.91			mA/°C
Reverse voltage	V _R	5	5				v
Operating temperature	T _{opr}	-20 to +70					°C
Storage temperature	T _{stg}	30 to +80					°C
*3 Soldering temperature	T _{sol}	260 (within 5 seconds)					°C

*1 Per dot

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

*3 At the position of 2.6 mm from (A) level of outline dimensions

GL105R1 1 (Red)

■ **Electro-optical** Characteristics ※1

(Ta = 25°C)

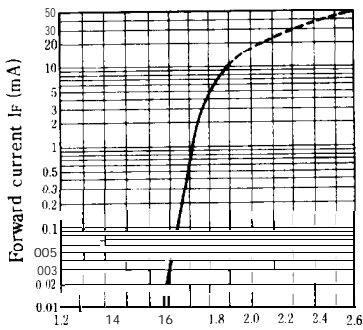
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V _F	GL105R11	I _F = 5mA	—	1.9	2.5	v
※4 Luminous intensity	I _V	GL105R11	I _F = 5mA	0.1	0.25	—	mcd
Peak emission wavelength	λ _p	GL105R11	I _F = 5mA	—	695	—	nm
Spectrum radiation bandwidth	Δλ	GL105R11	I _F = 5mA	—	100	—	nm
Reverse current	I _R	GL105R11	V _R = 4V	—	—	10	μA
Response frequency	f _c	GL105R11	—	—	4	—	MHz

※1 Per dot

※4 Tolerance: ±30%

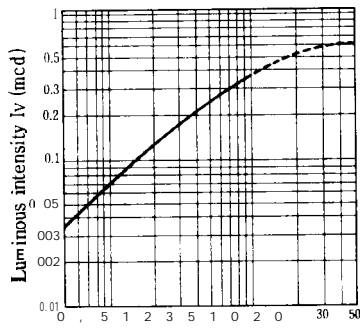
■ Characteristics Diagrams

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



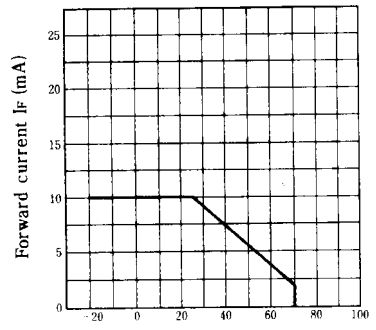
Forward voltage V_F (V)

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



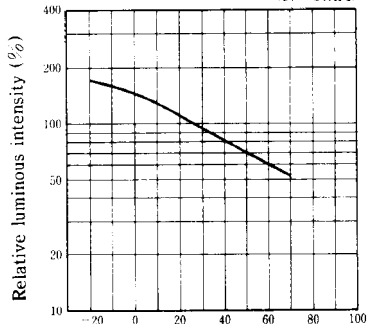
Forward current I_F (mA)

Forward Current Derating Curve



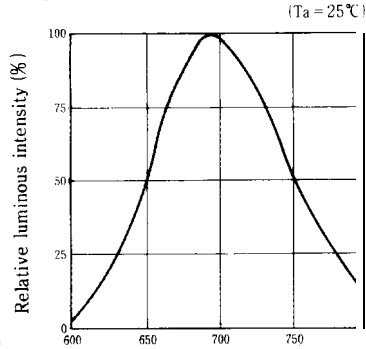
Ambient temperature Ta (°C)

Relative Luminous Intensity vs. Ambient Temperature (I_F = 5mA)



Ambient temperature Ta (°C)

Spectrum Distribution (Ta = 25°C)



Wavelength λ (nm)

SHARP

GL105H11(Yellow)

■ Electro-optical Characteristics *1

(Ta = 25°C)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX	Unit
Forward voltage	V _F	GL105H11	I _F = 10mA	—	1.9	2.5	v
*4 Luminous intensity	I _v	GL105H11	I _F = 10mA	0.2	0.5	—	mcd
Peak emission wavelength	λ _p	GL105H11	I _F = 10mA	—	585	—	nm
Spectrum radiation bandwidth	Δλ	GL105H11	I _F = 10mA	—	30	—	nm
Reverse current	I _R	GL105H11	V _R = 4V			10	μA
Response frequency	f _c	GL105H11	—	—	4	—	MHz

*1 Per dot

*4 Tolerance: ±30%

■ Characteristics Diagrams

