GL112M9

12-Dots Array LED, Dichromatic
(8 yellow-green dots and 4 red dots)

■ Model No.
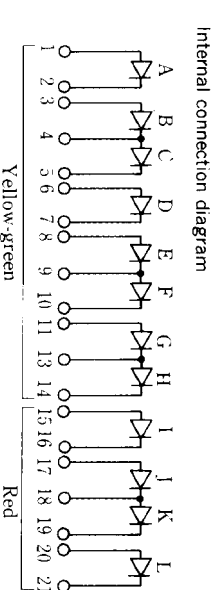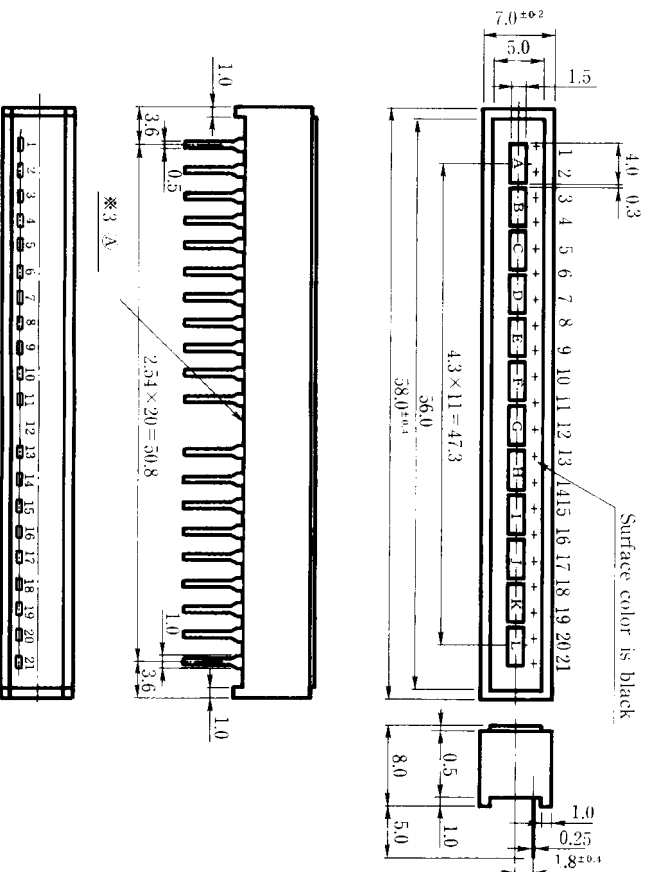
GL112M9   Yellow-green   GaP

          Red   GaP

■ Features

1. Radiation shape per dots 1.5 × 4.0mm
2. Outline dimensions 7.0 × 58.0mm
3. 12 dots case mold type
4. Yellow-green : 8 dots
5. Red : 4 dots

■ Outline Dimensions

(Unit mm)

Surface color is black

Internal connection diagram

Yellow-green

Red

Unspecified tolerance ±0.38mm

GL1 12M9

■ Absolute Maximum Ratings [1]

(Ta = 25℃)

Parameter		Symbol	GL112M9				Unit
			Yellow-green	Red			
Power dissipation		P	38	25			mW
Continuous forward current		I_F	15	10			mA
[2] Peak forward current		I_{FM}	50	50			mA
Derating factor	DC	—	0.27	0.18			mA/℃
	Pulse	—	091	0.91			mA/℃
Reverse voltage		V_R	5	5			v
Operating temperature		T_{opr}	−20 to +70				℃
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 Ⓐ level of outline dimensions

7

GL1 12M9(Yellow-green/Red)

### ■ Electro-optical Characteristics ※1

(Ta = 25℃)

| Parameter	Symbol	Radiation color	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	Yellow-green	$I_F = 10mA$	—	2.0	2.5	V
		Red	$I_F = 5mA$	—	1.9	2.5	
※4 Luminous intensity	I\	Yellow-green	$I_F = 10mA$	0.2	0.5	—	mcd
		Red	$I_F = 5mA$	0.15	0,3	—	
Peak emission wavelength	λ_p	Yellow-green	$I_F = 10mA$	—	565	—	'm
		Red	$I_F = 5mA$	—	695	—	
Spectrum radiation bandwidth	$\Delta\lambda$	Yellow-green	$I_F = 10mA$	—	30	—	' m
		Red	$I_F = 5mA$	—	100	—	
Reverse current	I_R	Yellow-green	$V_R = 4V$		—	10	μA
		Red	$V_R = 4V$		—	10	
Response frequency	f_c	Yellow-green	—		—	4	—	MHz
		Red			—	4	—	

※1 Per dot
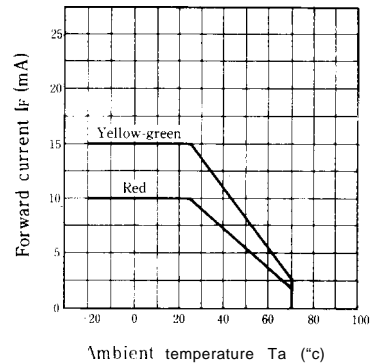※4 Tolerance: ±30%

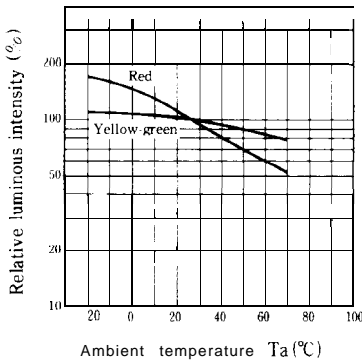### ■ Characteristics Diagrams

Forward Current vs. Forward Voltage (Ta = 25℃)
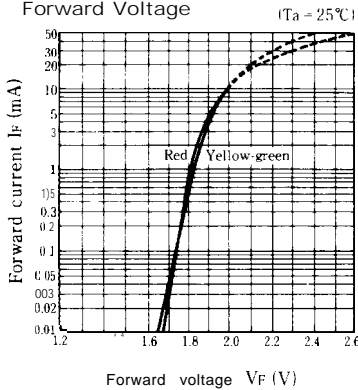
Luminous Intensity vs. Forward Current (Ta = 25℃)
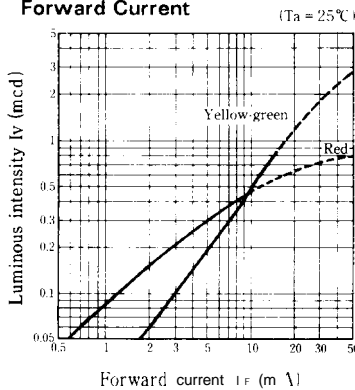
Forward Current Derating Curve

Relative Luminous Intensity vs. Ambient Temperature (Y. g I_F = 10mA / Red I_F = 5mA)

Spectrum Distribution (Ta = 25℃)