GL107M8

7-Dots Array LED, Dichromatic (4 yellow-green dots and 3 red dots)

■ Model No.
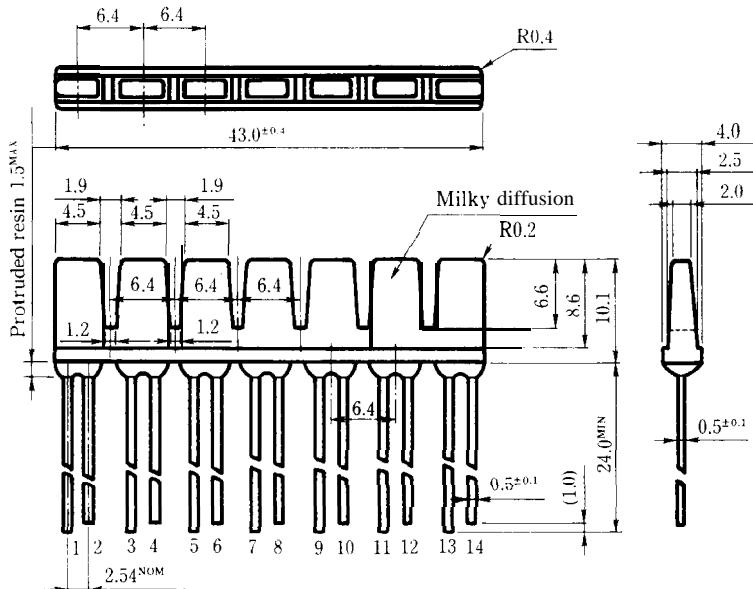
GL107M8 Yellow-green   GaP
              Red   GaP

■ Features
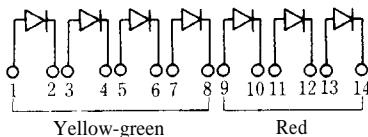
1. Radiation shape per dots 2.0 x 4.5mm
2. Outline dimensions 4.0 x 43.0mm
3. 7 dots all resin mold type
4. Yellow-green : 4 dots
5. Red : 3 dots

■ Outline Dimensions   (Unit   mm)

Internal connection diagram

Yellow-green   Red

Unspecified tolerance ± O .2mm

GL107M8

■ Absolute Maximum Ratings [1]

(Ta=25°C)

Parameter	Symbol	GL107M8				Unit
		Yellow-green	Red			
Power dissipation	P	84	23			mW
Continuous forward current	I_F	30	10			mA
[2] Peak forward current	I_{FM}	50	50			mA
Derating factor	DC	–	0.40	0.13		mA/°C
	Pulse	–	0.67	0.67		mA/°C
Reverse voltage	V_R	5	5			V
Operating temperature	T_{opr}	-25 to +85				°C
Storage temperature	T_{stg}	−25 to +100				°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 1.6 mm from the bottom face of resin package

GL107M8(Yellow-green/Red)

■ Electro-optical Characteristics [1]
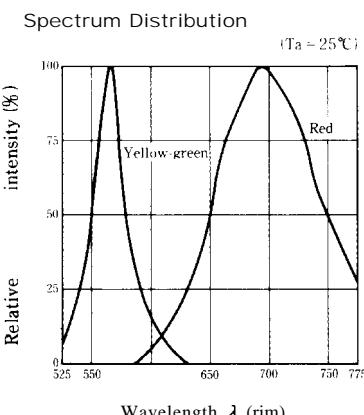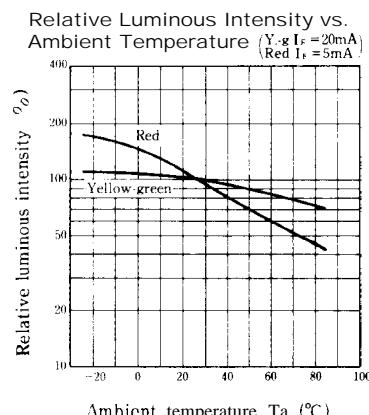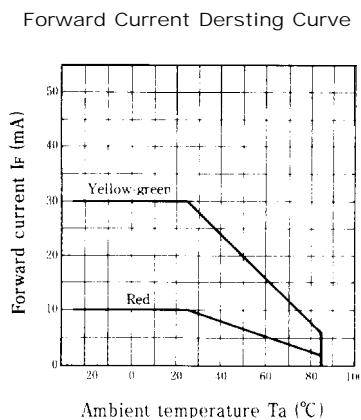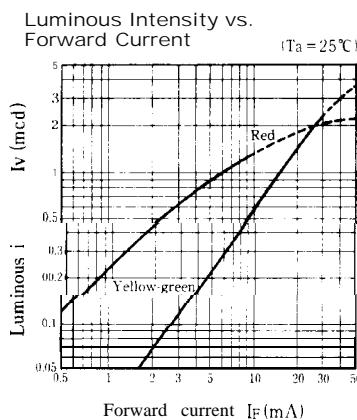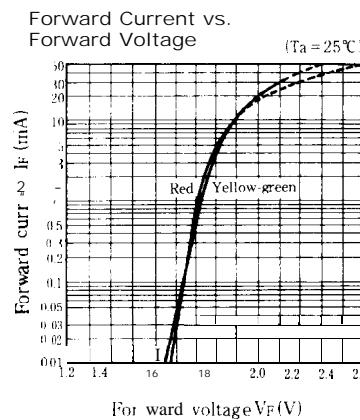
(Ta = 25℃)

| Parameter	Symbol	Radiation color	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	Yellow-green	$I_F = 20mA$	—	2.1	2.8	V
		Red	$I_F = 5mA$	—	1.9	2.3	
[4] Luminous intensity	I_V	Yellow-green	$I_F = 20mA$	0.6	1.4	—	mcd
		Red	$I_F = 5mA$	0.3	0.9	—	
Peak emission wavelength	λ_p	Yellow-green	$I_F = 20mA$	—	565	—	'm
		Red	$I_F = 5mA$	—	695	—	
Spectrum radiation bandwidth	$\Delta\lambda$	Yellow-green	$I_F = 20mA$	—	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 Dersting Curve

Relative Luminous Intensity vs. Ambient Temperature (Y-g I_F = 20mA, Red I_F = 5mA)

Spectrum Distribution (Ta = 25℃)