GL107M1 2
7-Dots Array LED, Dichromatic (4 yellow-green dots and 3 red dots)
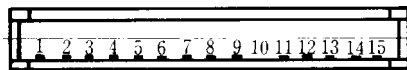
■ Model No.

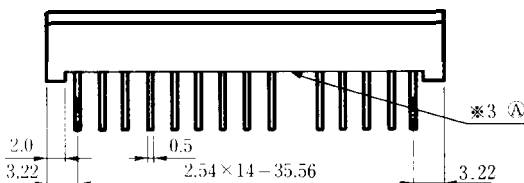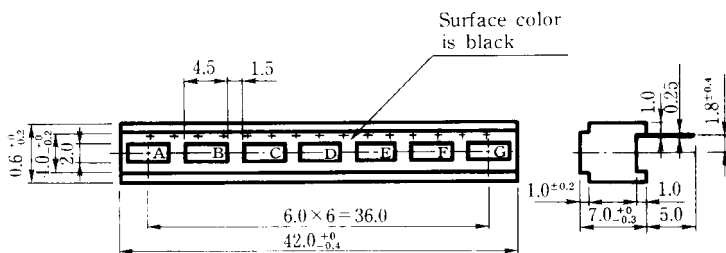**GL107M12**   Yellow-green   GaP
Red   GaP

■ Features
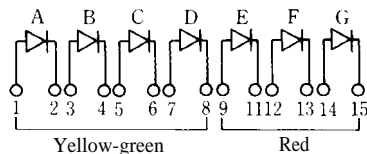
1. Radiation shape per dots 2.0 × 4.5mm
2. Outline dimensions 6.0 × 42.0mm
3. 7 dots case mold type
4. Yellow-green : 4 dots
5. Red : 3 dots

■ Outline Dimensions

(Unit: mm)

Surface color is black

Internal connection diagram

A B C D E F G

1 2 3 4 5 6 7 8 9 1112 13 14 15

Yellow-green   Red

[Unspecified tolerance : ± 0, 3mm]

7

GL107M1 2

■ **Absolute Maximum Ratings** *1   (Ta = 25℃)

Parameter		Symbol	GL107M12				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	091			mA/℃
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)				℃

*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

GL107M1 2(Yellow-green/Red)

■ Electro-optical Characteristics ※1   (Ta=25°C)

| 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_V	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

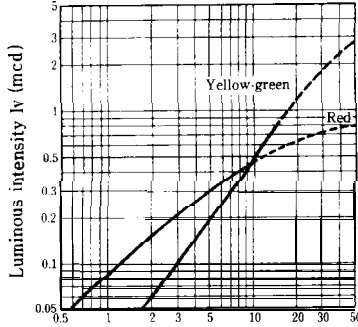**Forward Current vs. Forward Voltage** (Ta = 25°C)
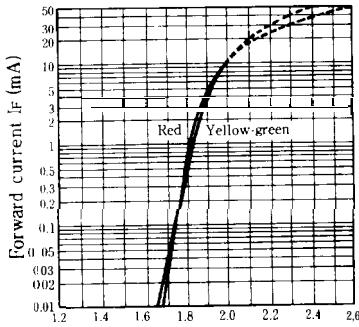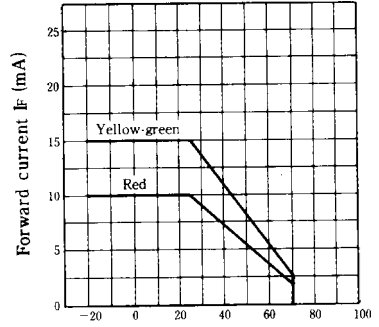

Forward voltage $V_F(V)$

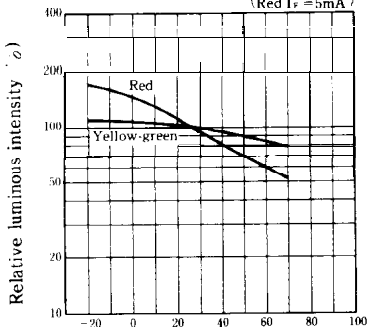**Luminous Intensity vs. Forward Current** (Ta = 25°C)

Forward current $I_F(mA)$

Forward Current Derating Curve

Ambient temperature $Ta(°C)$
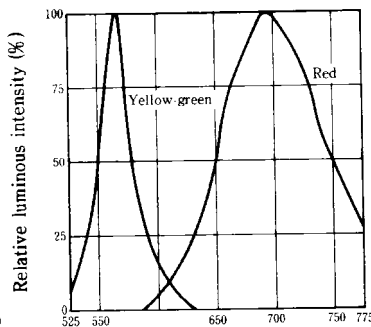
Relative Luminous intensity vs. Ambient Temperature (Y.-g:I$_F$=10mA / Red I$_F$=5mA)

Ambient temperature $Ta(°C)$

Spectrum Distribution (Ta = 25°C)

Wavelength λ (rim)

7

SHARP