

# LT6710

## φ 52mm Waterproof Package With Hood Type Dichromatic Solid State Lamp

### Model No.

LT6710 Yellow-green

Red (Super-luminosity)

GaP

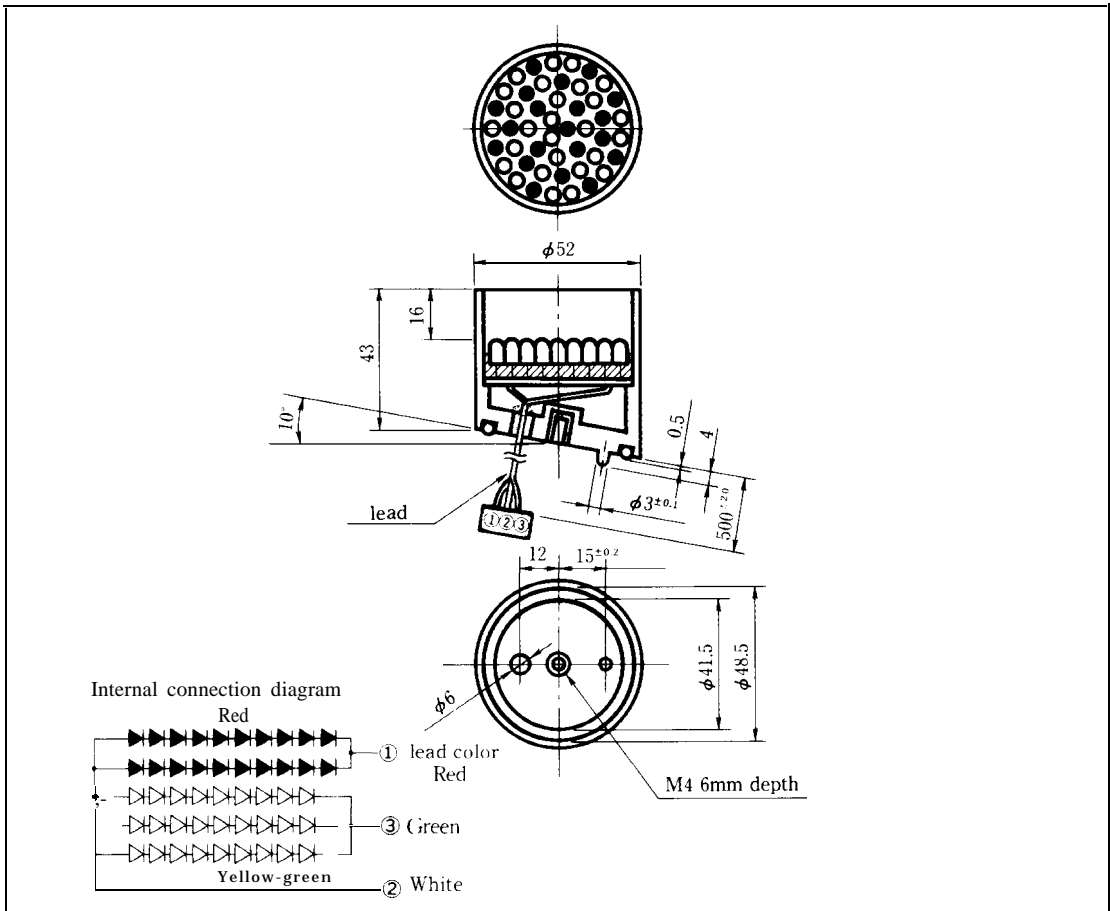
GaAlAs/GaAlAs

### Features

1. φ 52mm dichromatic solid state lamps
2. Radiation color : Yellow-green, red and orange (mixed color)
3. No. of built-in φ 5mm LED lamps  
Yellow-green : 27pcs. Red : 20pcs.
4. Waterproof package with hood
5. Static drive
6. Best suitable for outdoor and indoor information boards
7. Wide viewing angle

### Outline Dimensions

(Unit: mm)

**SHARP**

## LT6710 O

## ■ Absolute Maximum Ratings

(Ta = 25°C)

Parameter	Symbol	LT6710				Unit
		Yellow-green	Red			
Power dissipation	P	1.7	1.1			W
Continuous forward current (DC )	I <sub>F</sub>	90	60			mA
Peak forward current	I <sub>FM</sub>					mA
Derating factor	DC		-			mA/°C
	Pulse		-			mA/°C
Reverse voltage (DC )	V <sub>R</sub>	24				V
Operating temperature	T <sub>opr</sub>	25 to +60				°C
Storage temperature	T <sub>stg</sub>	- 30 to +100				°C
Soldering temperature	T <sub>sol</sub>	-				°C

LT671 O (Yellow-green/Red)

Electro-optical Characteristics (DC)

(Ta=25°C)

Parameter	Symbol	Radiation color	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V <sub>F</sub>	Yellow-green	I <sub>F</sub> =60mA	—	19.0	20.5	V
		Red	I <sub>F</sub> =40mA	—	18.5	20.0	
Luminous intensity	I <sub>v</sub>	Yellow-green	I <sub>F</sub> =60mA	2.0	3.2	—	cd
		Red	I <sub>F</sub> =40mA	4.0	6.0	—	
Peak emission wavelength	λ <sub>p</sub>	Yellow-green	I <sub>F</sub> =60mA	—	565	—	nm
		Red	I <sub>F</sub> =40mA	—	660	—	
Spectrum radiation bandwidth	Δλ	Yellow-green	I <sub>F</sub> =60mA	—	30	—	nm
		Red	I <sub>F</sub> =40mA	—	20	—	
Reverse current	I <sub>R</sub>	Yellow-green	V <sub>R</sub> =24V	—	—	100	μA
		Red	V <sub>R</sub> =24V	—	—	100	
Terminal capacitance	C <sub>t</sub>	Yellow-green	—	—	—	—	pF
		Red	—	—	—	—	
Response frequency	f <sub>c</sub>	Yellow-green	—	—	4	—	MHz
		Red	—	—	8	—	

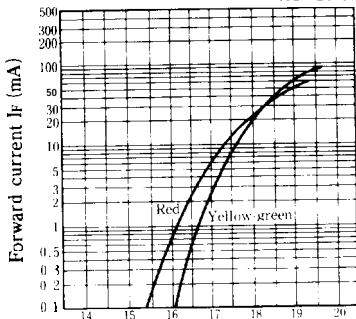
\*1 Tolerance: ±20%

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Characteristics Diagrams

Forward Current vs. Forward Voltage

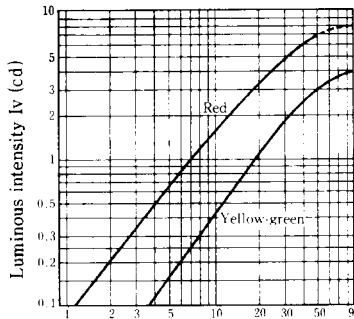
(Ta=25°C)



Forward voltage V<sub>F</sub> (V)

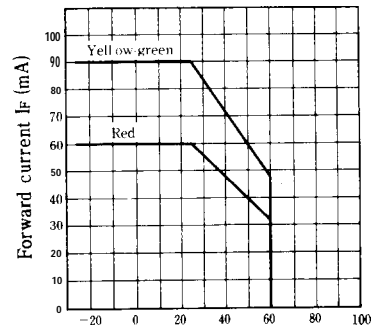
Luminous Intensity vs. Forward Current

(Ta=25°C)



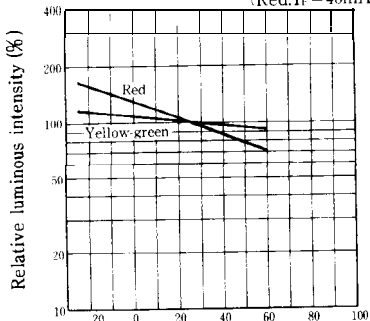
Forward current I<sub>F</sub> (mA)

Forward Current Derating Curve



Ambient temperature T<sub>a</sub> (°C)

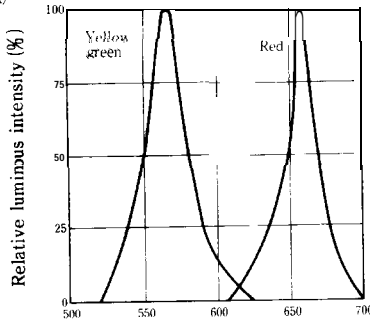
Relative Luminous Intensity vs. Ambient Temperature (Y.g: I<sub>F</sub>=60mA, Red: I<sub>F</sub>=40mA)



Ambient temperature T<sub>a</sub> (°C)

Spectrum Distribution

(Ta=25°C)



Wavelength λ (nm)

Radiation Diagram

(Ta=25°C)

