

# LT5200M

## 4X4 Dichromatic Dot Matrix LEDs

### Model No.

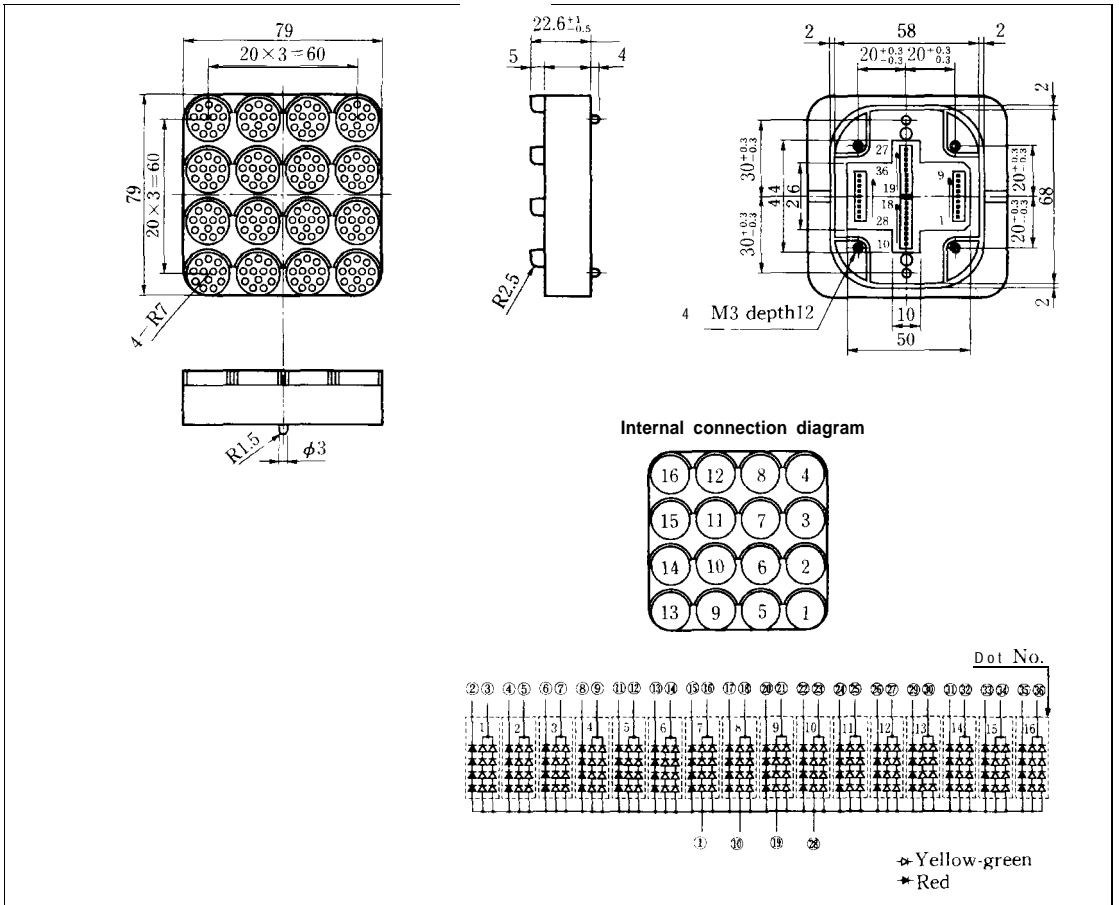
LT5200M Yellow-green GaP  
 Red(Super-luminosity) GaAlAs/GaAlAs

### Features

1. Waterproof package with hood
2. Radiation color : Yellow-green, red and orange(mixed color)
3. Best suitable for outdoor and indoor information boards

### Outline Dimensions

(Unit : mm)



## LT5200M

## ■ Absolute Maximum Ratings(Per dot)

(Ta = 25°C)

Parameter	SYMBOL	LT5200M				Unit
		Yellow-green	Red			
*1 Power dissipation	P	8.84	3.84			W
Continuous forward current	I <sub>F</sub>	60	30			mA
Peak forward current	I <sub>FM</sub>	—	—			mA
Derating factor	DC					nA/°C
	Pulse					nA/°C
Reverse voltage	V <sub>R</sub>	15				V
Operating temperature	T <sub>opr</sub>	-20 to +70				°C
Storage temperature	T <sub>stg</sub>	-25 to +100				°C
Soldering temperature	T <sub>sol</sub>	—				°C

\*1 Per device

**LT5200M(Yellow-green/Red)**

**■ Electro-optical Characteristics( Per dot)**

(Ta=25°C)

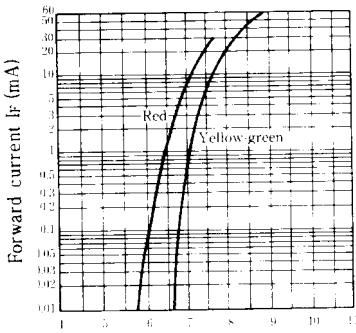
Parameter	Symbol	Radiation color	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V <sub>F</sub>	Yellow-green	I <sub>F</sub> = 40mA		8.4	9.2	V
		Red	I <sub>F</sub> = 20mA		7.4	8.0	
*2 Luminous intensity	I <sub>v</sub>	Yellow-green	I <sub>F</sub> = 40mA	720	1200	-	cd/m <sup>2</sup>
		Red	I <sub>F</sub> = 20mA	1800	3000	-	
Peak emission wavelength	λ <sub>P</sub>	Yellow-green	I <sub>F</sub> = 40mA		565	-	nm
		Red	I <sub>F</sub> = 20mA		660	-	
Spectrum radiation bandwidth	Δλ	Yellow-green	I <sub>F</sub> = 40mA		30	-	nm
		Red	I <sub>F</sub> = 20mA		20	-	
Reverse current	I <sub>R</sub>	Yellow-green	V <sub>R</sub> = 15V			100	μA
		Red	V <sub>R</sub> = 15V			100	
Terminal capacitance	C <sub>t</sub>	Yellow-green	-				pF
		Red	-				
Response frequency	f <sub>c</sub>	Yellow-green	-		0.8	-	MHz
		Red	-		7	-	

\*2 Per device, Tolerance : ±20%

**■ Characteristics Diagrams**

Forward Current vs. Forward Voltage

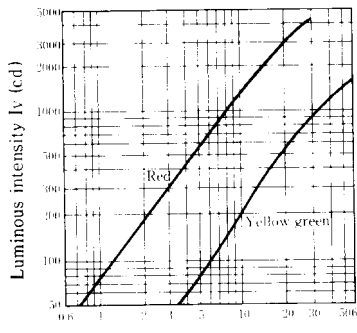
(Ta=25°C)



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

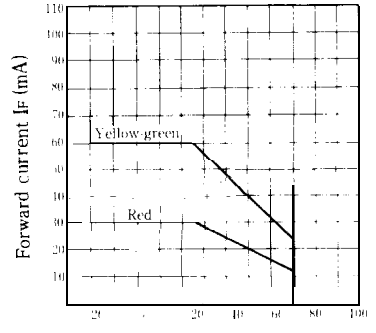
Luminous Intensity vs. Forward Current

(Ta=25°C)



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

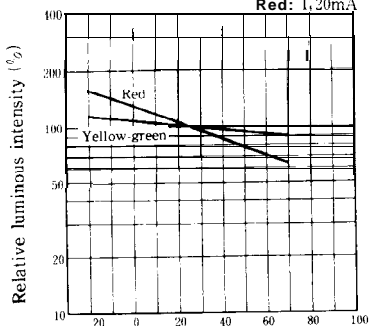
Forward Current Derating Curve



Ambient temperature Ta (°C)

Relative Luminous Intensity vs. Ambient Temperature

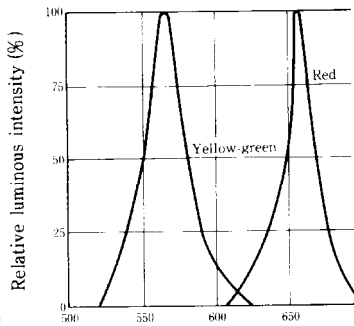
(Y.G. I<sub>F</sub> = 40mA  
Red: I<sub>F</sub> = 20mA)



Ambient temperature Ta (°C)

Spectrum Distribution

(Ta=25°C)



Wavelength λ (nm)