

LT5200M

4 × 4 Dichromatic Dot Matrix LEDs

Model No.

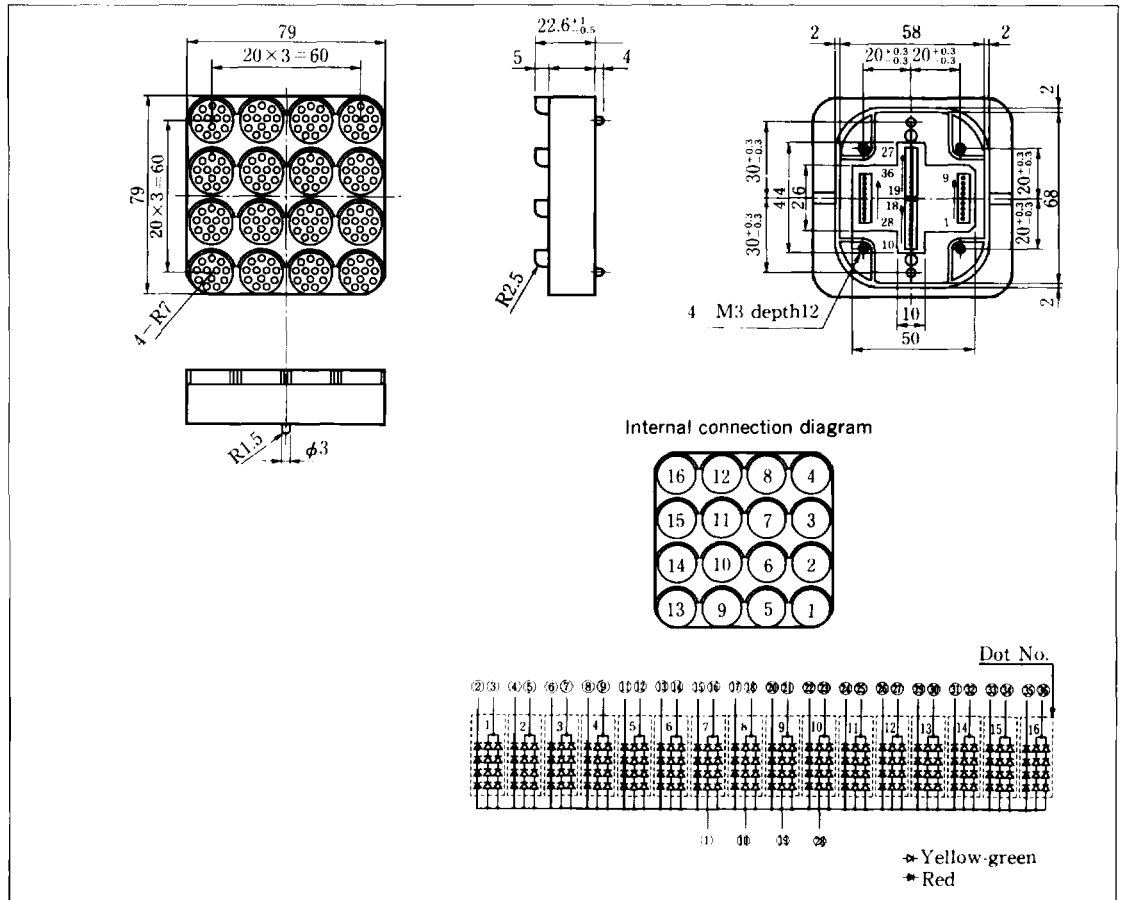
LT5200M Yellow-green GaP
 Red(Super-luminosity) GaAlAs/GaAlAs

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)



SHARP

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 _F	60	30			mA
Peak forward current	I _{FM}	—	—			mA
Derating factor	DC	—	—			mA/°C
	Pulse	—	—			mA/°C
Reverse voltage	V _R	15				V
Operating temperature	T _{opr}	-20 to +70				°C
Storage temperature	T _{stg}	-25 to +100				°C
Soldering temperature	T _{sol}	—				°C

*1 Per device

LT5200M(Yellow-green/Red)

■ Electro-optical Characteristics(Per dot)

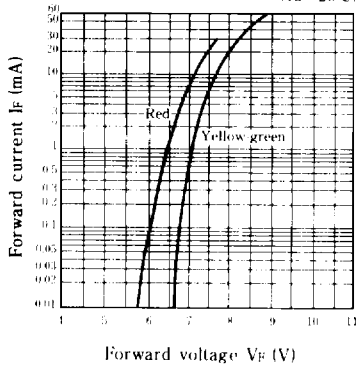
(Ta=25°C)

Parameter	Symbol	Radiation color	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V _F	Yellow-green	I _F = 40mA	—	8.4	9.2	V
		Red	I _F = 20mA	—	7.4	8.0	
*2 Luminous intensity	I _V	Yellow-green	I _F = 40mA	720	1200	—	cd/m ²
		Red	I _F = 20mA	1800	3000	—	
Peak emission wavelength	λ _p	Yellow-green	I _F = 40mA	—	565	—	nm
		Red	I _F = 20mA	—	660	—	
Spectrum radiation bandwidth	Δλ	Yellow-green	I _F = 40mA	—	30	—	nm
		Red	I _F = 20mA	—	20	—	
Reverse current	I _R	Yellow-green	V _R = 15V	—	—	100	μA
		Red	V _R = 15V	—	—	100	
Terminal capacitance	C _t	Yellow-green	—	—	—	—	pF
		Red	—	—	—	—	
Response frequency	f _c	Yellow-green	—	—	0.8	—	MHz
		Red	—	—	7	—	

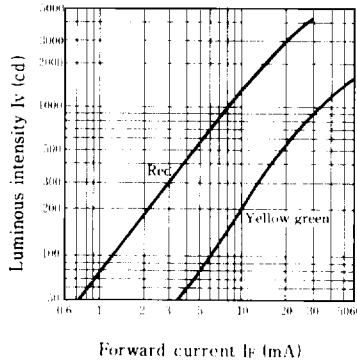
*2 Per device, Tolerance : ±20%

■ Characteristics Diagrams

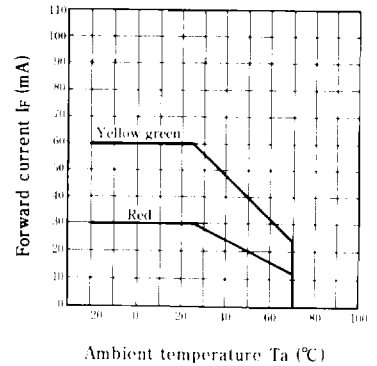
Forward Current vs. Forward Voltage (Ta = 25°C)



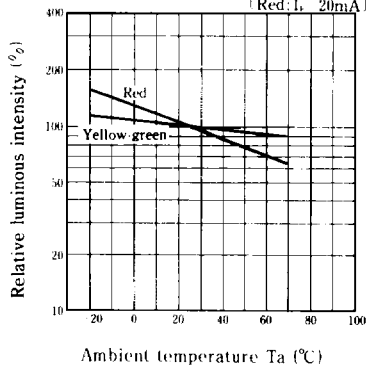
Luminous Intensity vs. Forward Current (Ta = 25°C)



Forward Current Derating Curve



Relative Luminous Intensity vs. Ambient Temperature (Y.G.: I_F = 40mA, Red: I_F = 20mA)



Spectrum Distribution (Ta = 25°C)

