

# LT5020S

## 24 X 24 Dot Matrix LEDs

### ■ Model No.

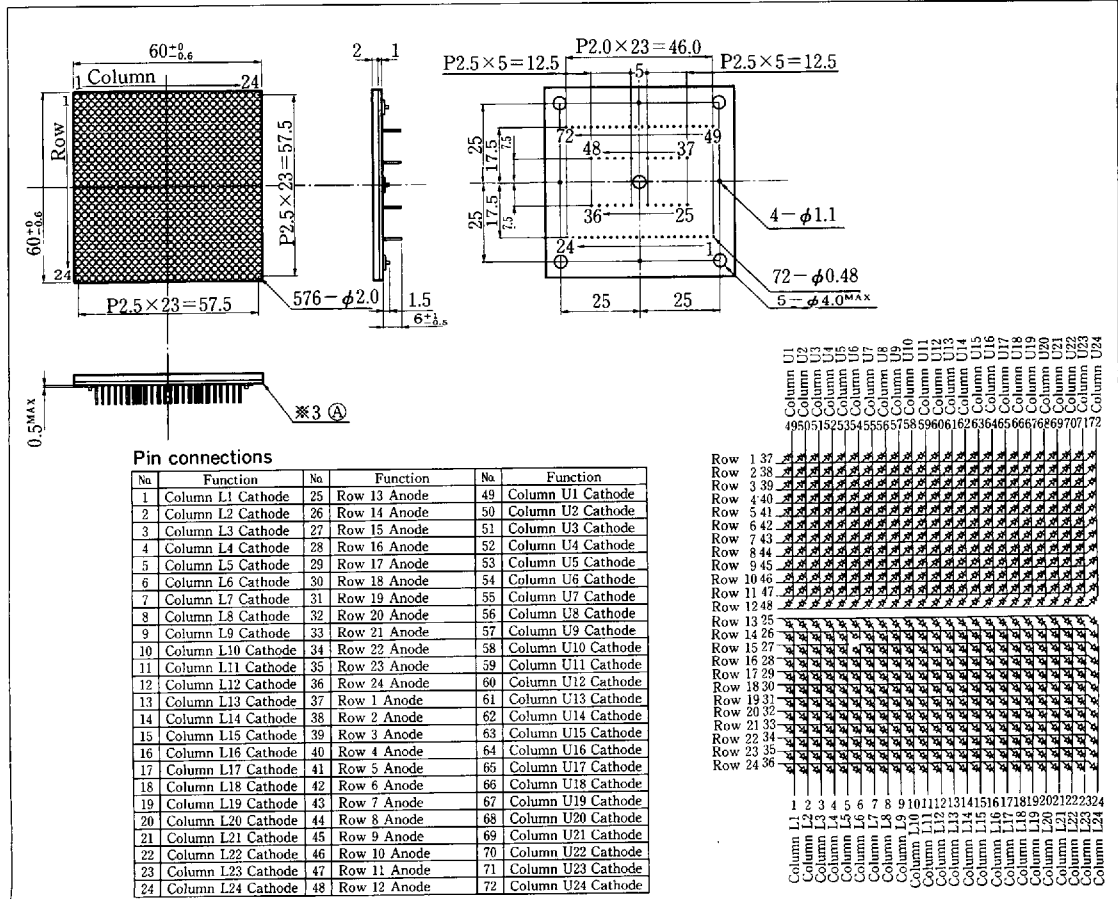
LT5020S Sunset orange GaAsP/GaP

### ■ Features

1. Substrate type
2. 2.26" character height

### ■ Outline Dimensions

(Unit : mm)



8180798 0012909 469

SHARP

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## LT5020S

## ■ Absolute Maximum Ratings

(Ta = 25°C)

Parameter		Symbol	LT5020S					Unit
*1 Power dissipation		P	3240					mW
Continuous forward current	Per dot	I <sub>F</sub>	15					mA
*2 Peak forward current	Per dot	I <sub>FM</sub>	50					mA
Derating factor	Per dot	DC	—	—				mA/°C
		Pulse	—	0.91				mA/°C
Reverse voltage	Per dot	V <sub>R</sub>	5					V
Operating temperature		T <sub>opr</sub>	-20 to +60					°C
Storage temperature		T <sub>stg</sub>	-20 to +80					°C
*3 Soldering temperature		T <sub>sol</sub>	260 (within 5 seconds)					°C

※1 Per device : 576 chips

※2 Duty ratio=1/12, Pulse width=0.1ms

※3 At the position of 1.6 mm from ④ level of outline dimensions

**LT5020S(Sunset orange)**

**■ Electro-optical Characteristics\*4**

(Ta=25°C)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V <sub>F</sub>	LT5020S	I <sub>F</sub> = 10mA	—	1.9	—	V
		LT5020S	I <sub>FM</sub> = 50mA	—	2.2	3.0	
*5 Luminous intensity	I <sub>V</sub>	LT5020S	I <sub>F</sub> = 10mA	1.1	2.0	—	mcd
Peak emission wavelength	λ <sub>P</sub>	LT5020S	I <sub>FM</sub> = 50mA	—	610	—	nm
Spectrum radiation bandwidth	Δλ	LT5020S	I <sub>FM</sub> = 50mA	—	35	—	nm
Reverse current	I <sub>R</sub>	LT5020S	V <sub>R</sub> = 4V	—	—	10	μA
Response frequency	f <sub>c</sub>	LT5020S	—	—	4	—	MHz

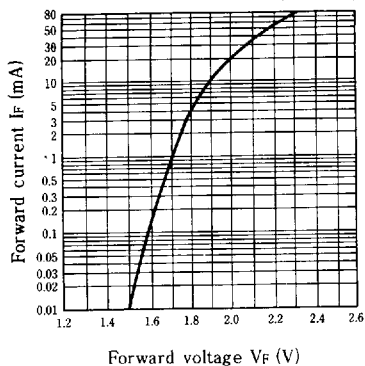
\*4 Per dot

\*5 Tolerance : ±30%

**■ Characteristics Diagrams**

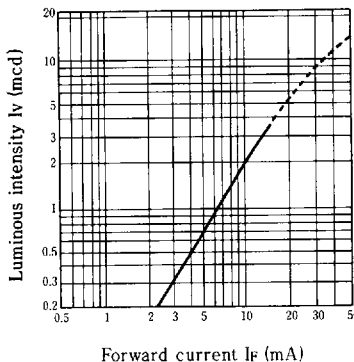
Forward Current vs. Forward Voltage

(Ta = 25°C)

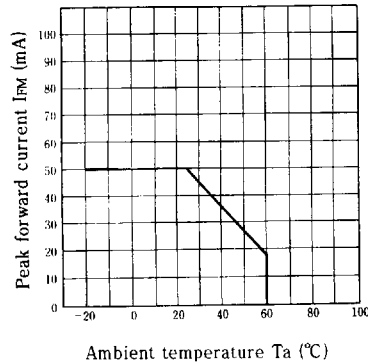


Luminous Intensity vs. Forward Current

(Ta = 25°C)

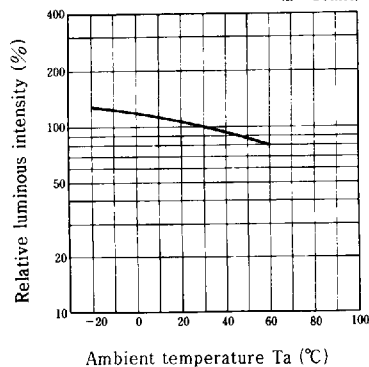


Peak Forward Current Derating Curve



Relative Luminous Intensity vs. Ambient Temperature

(If = 10mA)



Spectrum Distribution

(Ta = 25°C)

