LT5020S

24X 24 Dot Matrix LEDs

■ Model No.

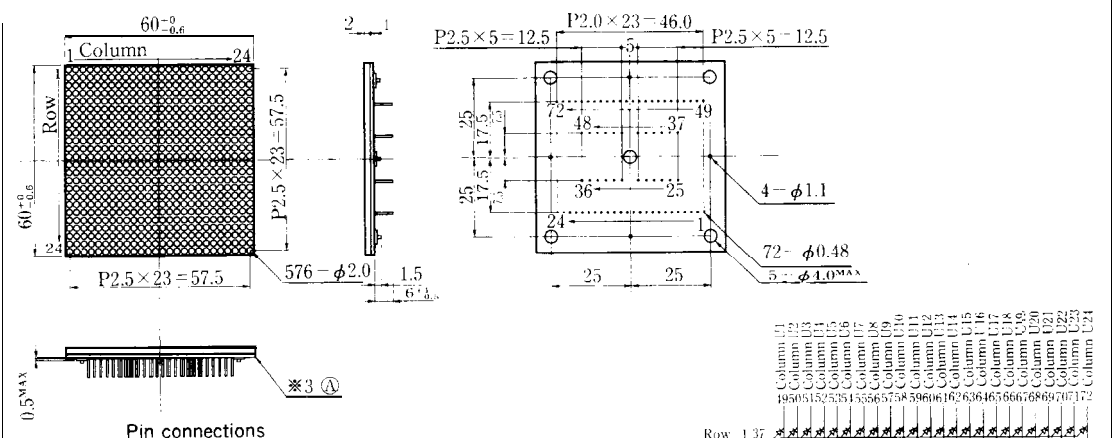
LT5020S Sunset orange GaAsP/GaP

■Features

1. Substrate type
2. 2.26" character height

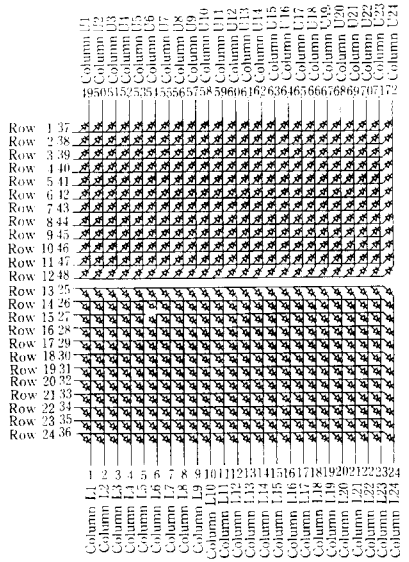
■ Outline Dimensions

(Unit : mm)



Pin connections

No.	Function	No.	Function	No.	Function
1	Column L1 Cathode	25	Row 13 Anode	49	Column U1 Cathode
2	Column L2 Cathode	26	Row 14 Anode	50	Column U2 Cathode
3	Column L3 Cathode	27	Row 15 Anode	51	Column U3 Cathode
4	Column L4 Cathode	28	Row 16 Anode	52	Column U4 Cathode
5	Column L5 Cathode	29	Row 17 Anode	53	Column U5 Cathode
6	Column L6 Cathode	30	Row 18 Anode	54	Column U6 Cathode
7	Column L7 Cathode	31	Row 19 Anode	55	Column U7 Cathode
8	Column L8 Cathode	32	Row 20 Anode	56	Column U8 Cathode
9	Column L9 Cathode	33	Row 21 Anode	57	Column U9 Cathode
10	Column L10 Cathode	34	Row 22 Anode	58	Column U10 Cathode
11	Column L11 Cathode	35	Row 23 Anode	59	Column U11 Cathode
12	Column L12 Cathode	36	Row 24 Anode	60	Column U12 Cathode
13	Column L13 Cathode	37	Row 1 Anode	61	Column U13 Cathode
14	Column L14 Cathode	38	Row 2 Anode	62	Column U14 Cathode
15	Column L15 Cathode	39	Row 3 Anode	63	Column U15 Cathode
16	Column L16 Cathode	40	Row 4 Anode	64	Column U16 Cathode
17	Column L17 Cathode	41	Row 5 Anode	65	Column U17 Cathode
18	Column L18 Cathode	42	Row 6 Anode	66	Column U18 Cathode
19	Column L19 Cathode	43	Row 7 Anode	67	Column U19 Cathode
20	Column L20 Cathode	44	Row 8 Anode	68	Column U20 Cathode
21	Column L21 Cathode	45	Row 9 Anode	69	Column U21 Cathode
22	Column L22 Cathode	46	Row 10 Anode	70	Column U22 Cathode
23	Column L23 Cathode	47	Row 11 Anode	71	Column U23 Cathode
24	Column L24 Cathode	48	Row 12 Anode	72	Column U24 Cathode



LT5020S

■Absolute Maximum Ratings

(Ta = 25°C)

Parameter			Symbol	LT5020S					Unit
※1 Power dissipation			P	3240					mW
Continuous forward current	Per dot		I_F	15					mA
※2 Peak forwrd current	Per dot		I_{FM}	50					mA
Derating factor	Per dot	‘ C	–						mA/°C
		Pulse	—	0.91					mA/°C
Reverse voltage	Per dot		V_R	5					V
Operating temperature			T“p,	–20 to +60					°C
Storage temperature			T_{stg}	–20 to +80					°C
※3 Soldering temperature			T_{sol}	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 Ⓐ level of outline dimensions

6

LT5020S(Sunset orange)

■ Electro-optical Characteristics※4

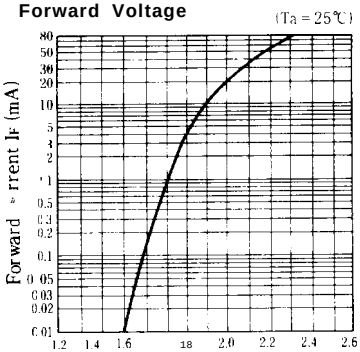
(Ta=25°C)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	LT5020S	I_F=10mA		1.9	--	V
		LT5020S	I_{FM}=50mA		2.2	3.0	
※5 Luminous intensity	Iv	LT5020S	I_F=10mA	1.1	2.0	–	mcd
Peak emission wavelength	λ_P	LT5020S	I_{FM}=50mA		610	–	nm
Spectrum radiation bandwidth	$\Delta\lambda$	LT5020S	I_{FM}=50mA		35	–	nm
Reverse current	I_R	LT5020S	V =4V			10	μA
Response frequency	f_c	LT5020S	–		4	–	MHz

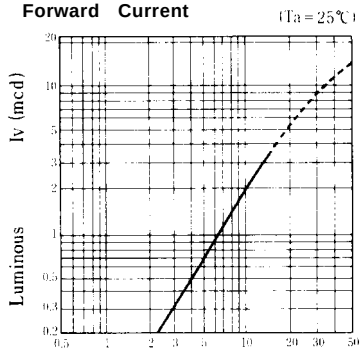
※4 Per dot
※5 Tolerance : ±30%

■Characteristics Diagrams

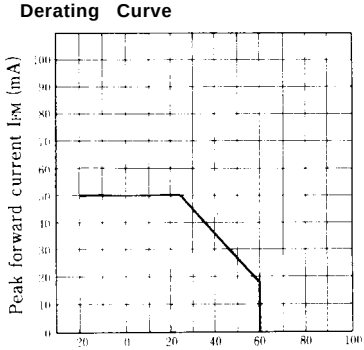
Forward Current vs. Forward Voltage



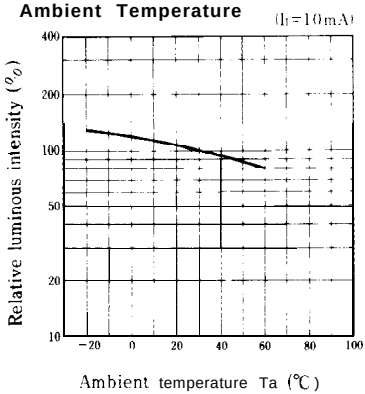
Luminous Intensity vs. Forward Current



Peak Forward Current Derating Curve



Relative Luminous Intensity vs. Ambient Temperature



Spectrum Distribution