

# High Reliability 2.28-inch Dual-Color 5mm 8x8 Dot Matrix LED Displays

# SDM-5882 SDM-5889

## GENERAL DESCRIPTION

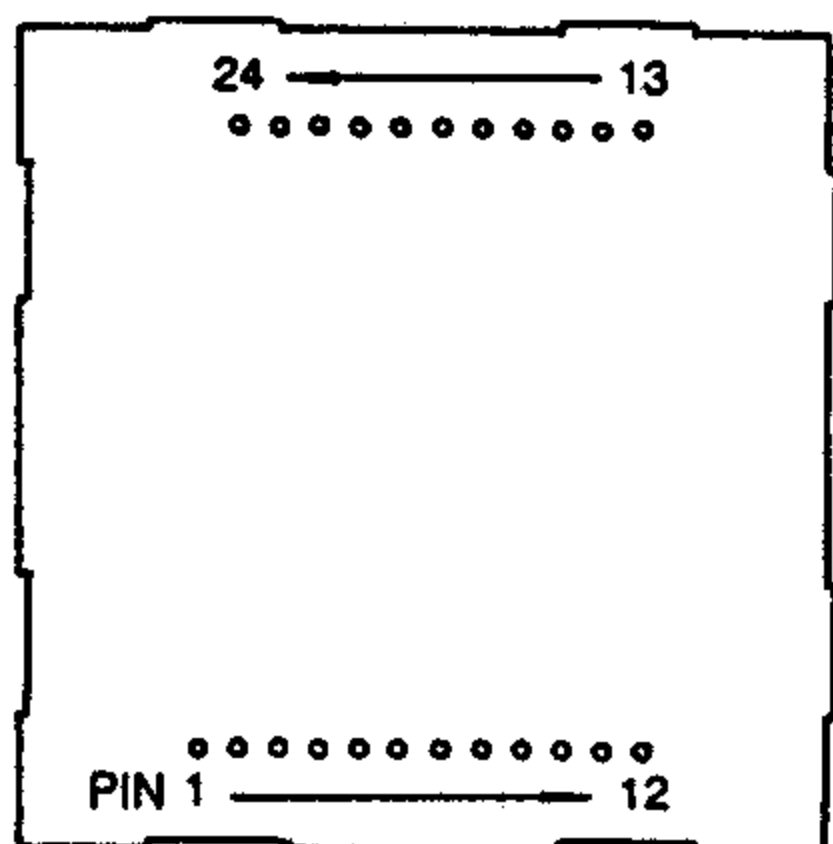
The SDM-5882 and the SDM-5889 series are an epoxy molded 2.28 in. (58.0mm) height, 5mm diameter and 8x8 dot matrix dual color LED displays. A red and green chips are contained in each dot and it could be displayed in red or green color separately and also appears in amber color when drive to red and green in the same time.

## FEATURES

1. High brightness with high contrast
2. Wide angle viewing
3. Low power consumption;  
Directly drive with I.C
4. Solid state reliability;  
Long operation life
5. Cathode- row (SDM5882) and cathode column (SDM-5889) types available

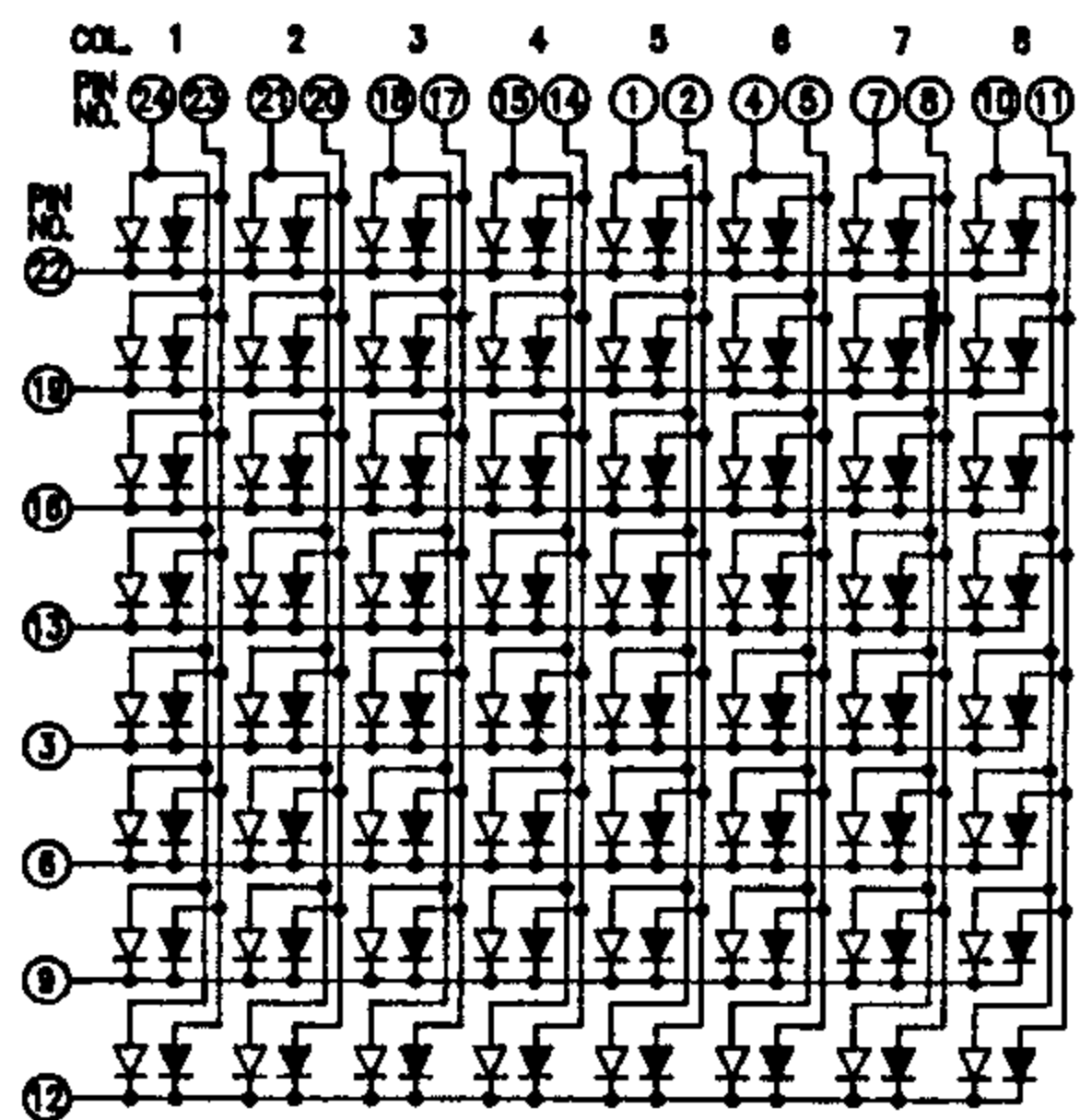
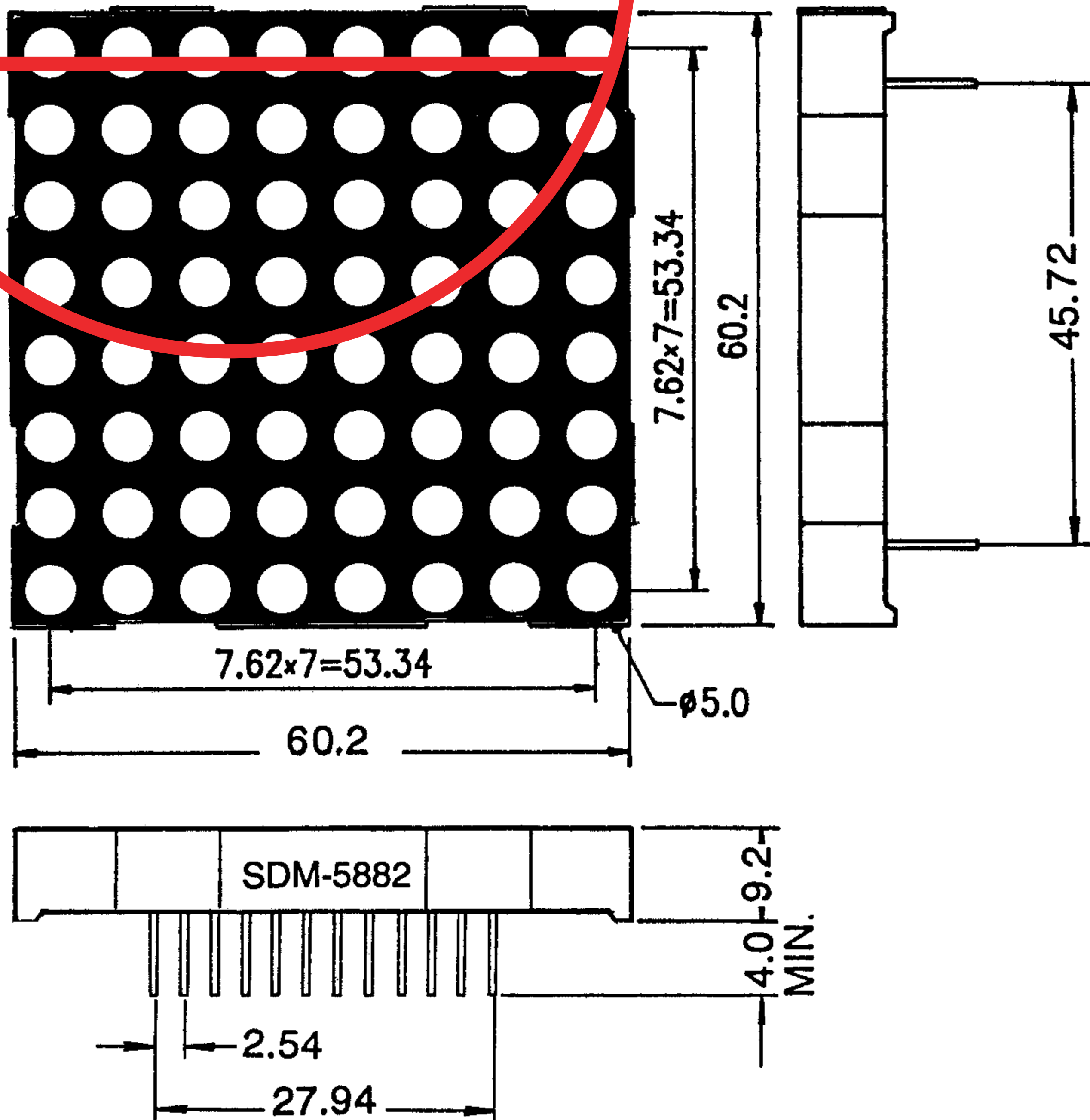
## CONNECTIONS GUIDE

(Top View)

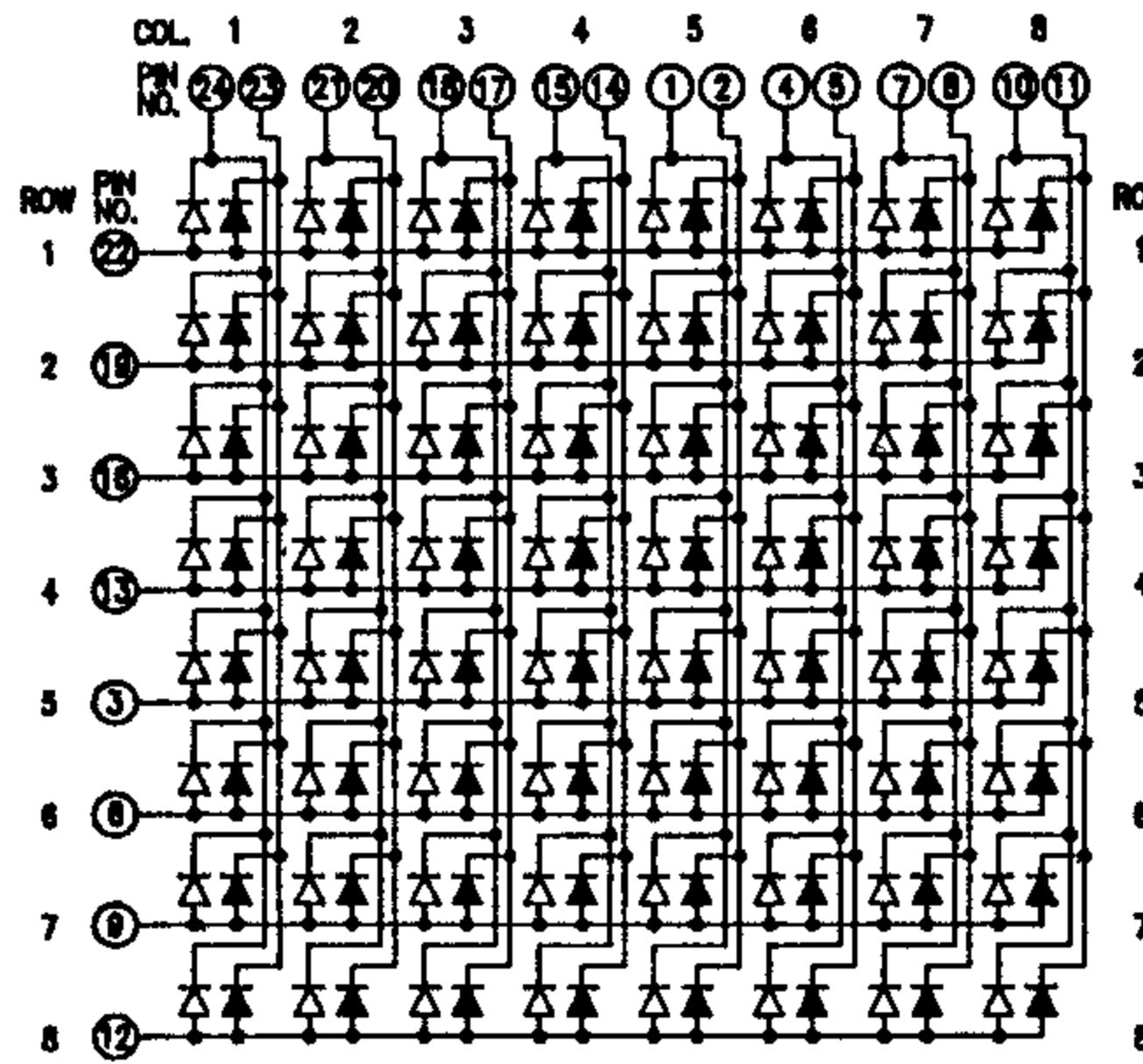


## PACKAGE DIMENSIONS

SCALE 1:1 (mm)



SDM 5882 (Cathode Row)



SDM 5889 (Cathode Column)



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## SDM 5882/5889 SR-UG (GaAsP/GaP-GaP)

### Orange SR SIDE (GaAsP/GaP)

Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Power dissipation/Total	4000	mW
Power dissipation/Chip	30	mW
Forward current	15	mA
Peak forward current	60*	mA
Reverse voltage	4	V
Operating temperature	-25 ~ +85	$^\circ\text{C}$
Storage temperature	-55 ~ +100	$^\circ\text{C}$

Electrical/Optical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Chip	$V_F$	$I_F = 10\text{mA}$	—	2.0	2.2	V
Reverse current/Chip	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous Intensity/Chip	$I_V$	$I_F = 10\text{mA}$	500	1000	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 10\text{mA}$	—	635	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 10\text{mA}$	—	35	—	nm

### Yellow-green UG SIDE (GaP)

Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Power dissipation/Total	4000	mW
Power dissipation/Chip	30	mW
Forward current	15	mA
Peak forward current	60*	mA
Reverse voltage	4	V
Operating temperature	-25 ~ +85	$^\circ\text{C}$
Storage temperature	-55 ~ +100	$^\circ\text{C}$

Electrical/Optical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Chip	$V_F$	$I_F = 10\text{mA}$	—	2.1	2.3	V
Reverse current/Chip	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous Intensity/Chip	$I_V$	$I_F = 10\text{mA}$	600	1200	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 10\text{mA}$	—	565	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 10\text{mA}$	—	30	—	nm

\* Pulse Width . . . . . 1 ms  
Duty Cycle . . . . . 1/5