

# High Reliability 0.33-inch LED Clock Displays

2014.10.27

# SCD-330A SCD-337A

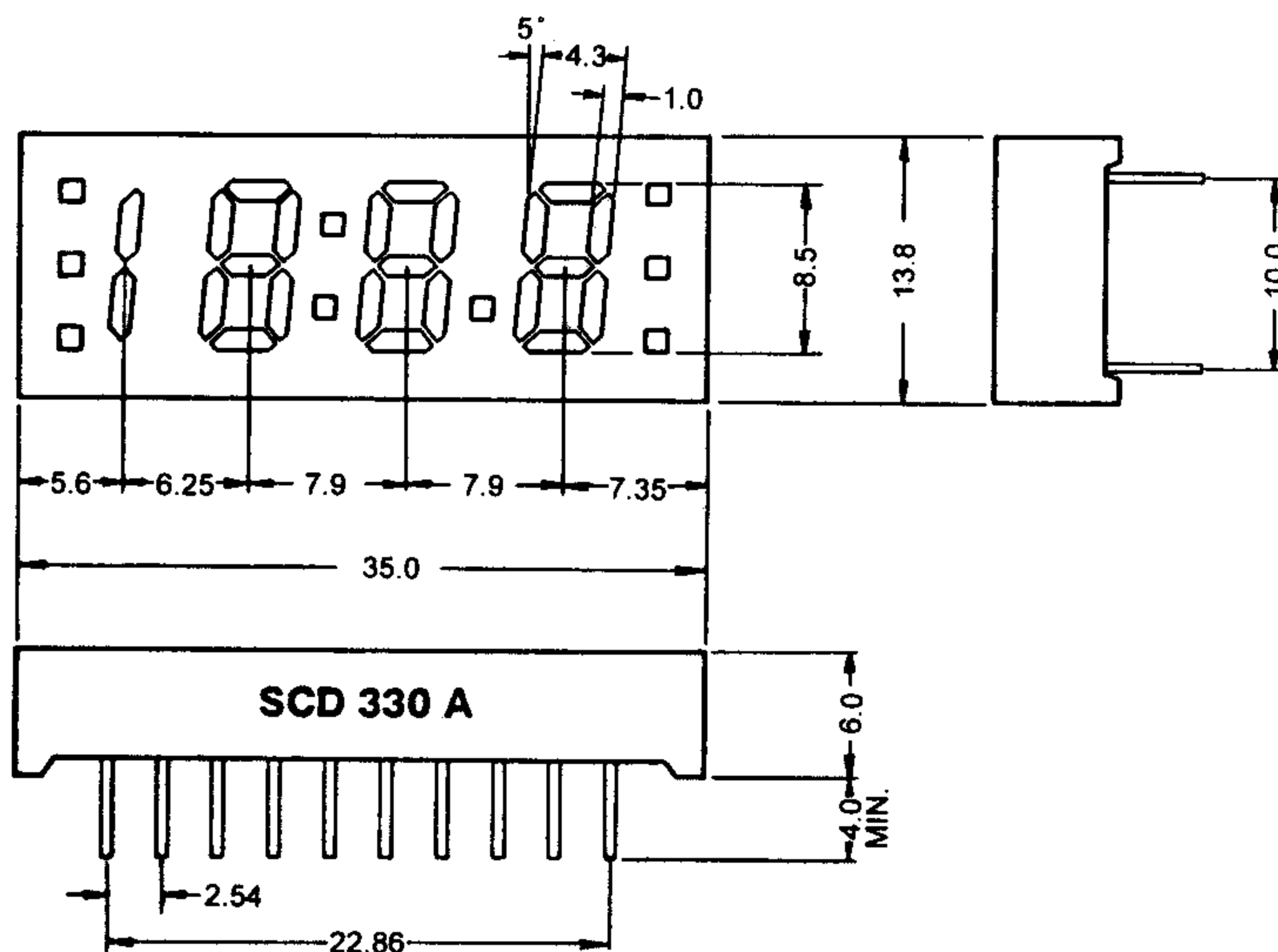
## GENERAL DESCRIPTION

The SCD-330A and the SCD-337A series are high reliability epoxy resin molded small 4 digit LED clock displays which character height is 0.33-inch (8.5mm) for application which space is at a premium and available in red, green, orange and yellow-green emitting colors.

## FEATURES

1. High brightness with high contrast
2. Low drive current and I.C compatible
3. Uniform brightness and wide angle viewing
4. High reliability and long term stability
5. Available in common cathode (SCD-330A) and common anode (SCD-337A) configurations

## PACKAGE DIMENSIONS

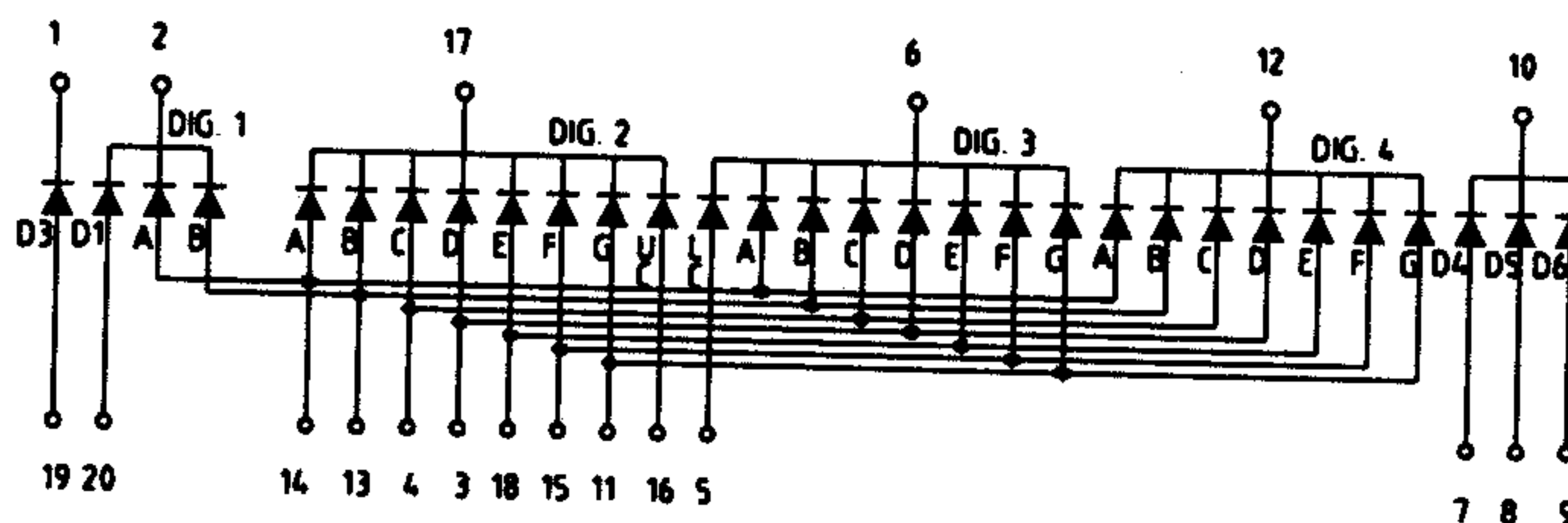
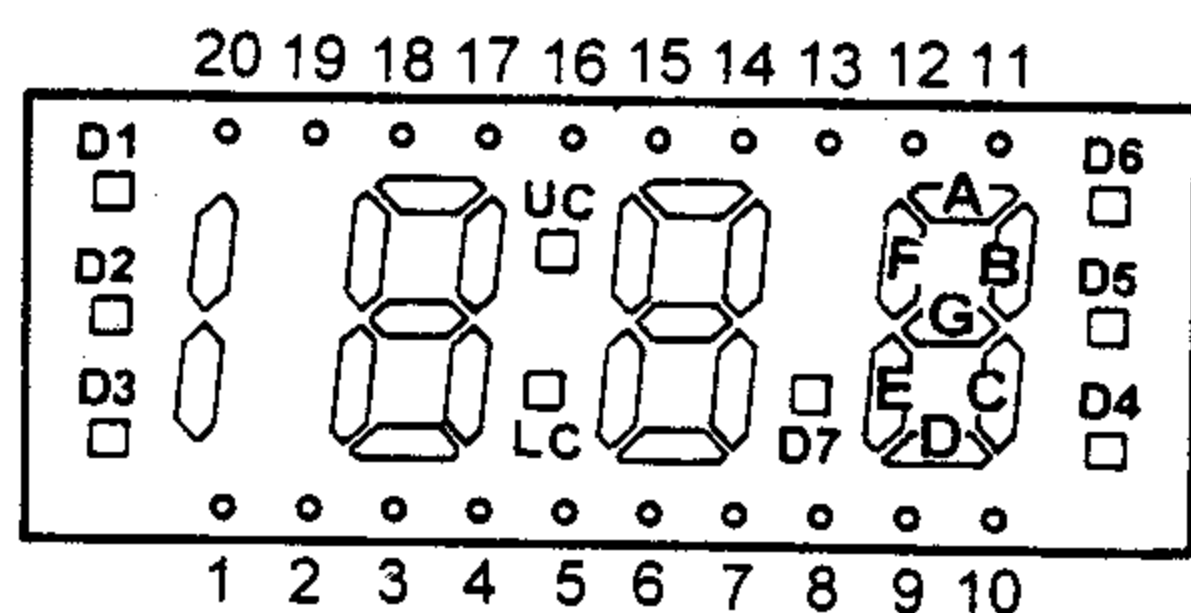


Actual size

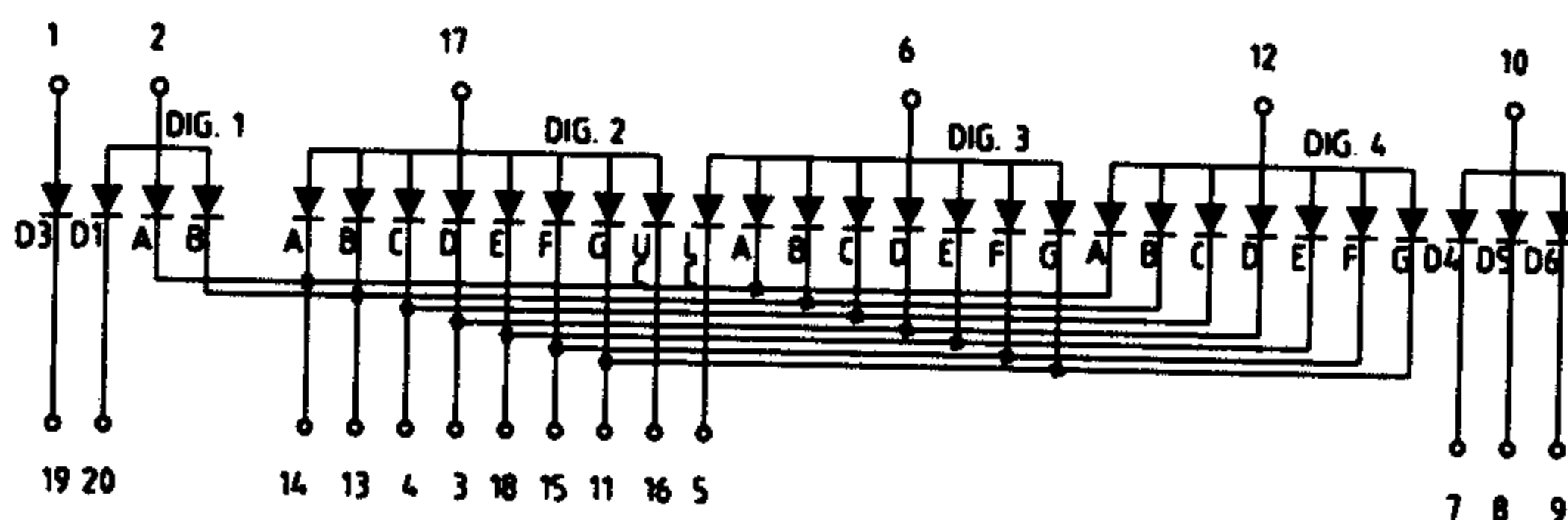


## PIN ARRANGEMENT

(Top View)



SCD-330A (Cathode Common)



SCD-337A (Anode Common)

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## Red SCD 330A/337AR (GaP)

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

Power dissipation/Total	1200	mW
Power dissipation/Seg	40	mW
Forward current	20	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/Seg	$V_F$	$I_F = 10\text{mA}$	—	2.1	2.3	V
Reverse current /Seg	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/digit	$I_v$	$I_F = 10\text{mA}$	300	800	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 10\text{mA}$	—	700	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 10\text{mA}$	—	100	—	nm

## Green SCD 330A/337AG (GaP)

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

Power dissipation/Total	1200	mW
Power dissipation/Seg	40	mW
Forward current	20	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/Seg	$V_F$	$I_F = 10\text{mA}$	—	2.1	2.3	V
Reverse current /Seg	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/digit	$I_v$	$I_F = 10\text{mA}$	350	900	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 10\text{mA}$	—	555	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 10\text{mA}$	—	30	—	nm

## Orange SCD 330A/337ASR (GaAsP/GaP)

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

Power dissipation/Total	1200	mW
Power dissipation/Seg	40	mW
Forward current	20	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/Seg	$V_F$	$I_F = 10\text{mA}$	—	2.0	2.2	V
Reverse current/Seg	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/digit	$I_v$	$I_F = 10\text{mA}$	700	1500	—	$\mu\text{cd}$
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 SCD 330A/337AUG (GaP)

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

Power dissipation/Total	1200	mW
Power dissipation/Seg	40	mW
Forward current	20	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/Seg	$V_F$	$I_F = 10\text{mA}$	—	2.1	2.3	V
Reverse current/Seg	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/digit	$I_v$	$I_F = 10\text{mA}$	600	1500	—	$\mu\text{cd}$
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