

# High Reliability 2.52-inch (64.0mm) 16x16 3.2 Dot Matrix LED Displays

# SDM-3167

## GENERAL DESCRIPTION

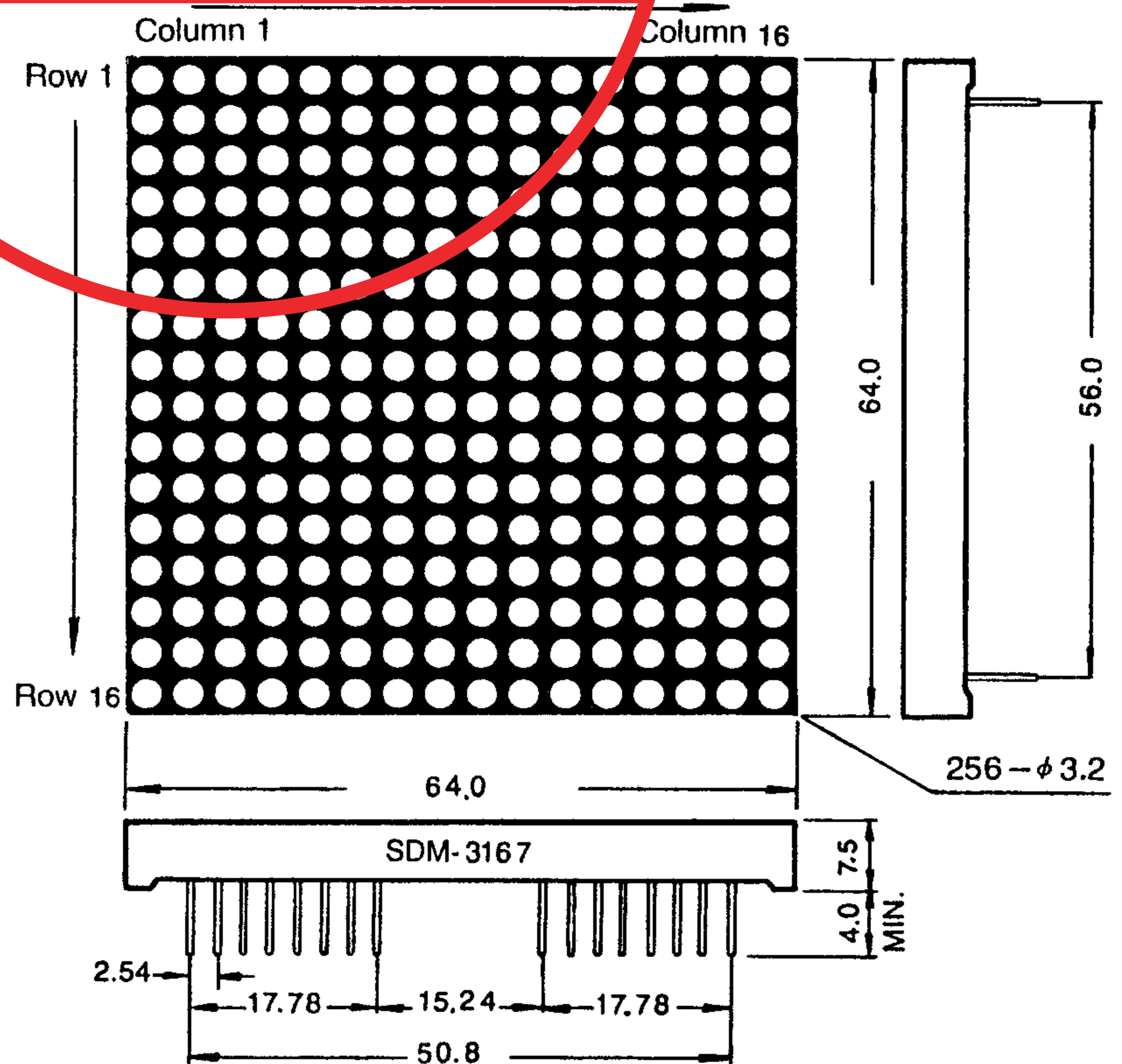
The SDM-3167 (cathode column) series are a high performance epoxy resin molded 64.0x64.0mm  $\phi$ 3.2 dot matrix LED displays. The standard units are available in red, orange and yellow-green emitting colors with 16x16 array x-y select, and constructed with black face and milky white segment color.

## FEATURES

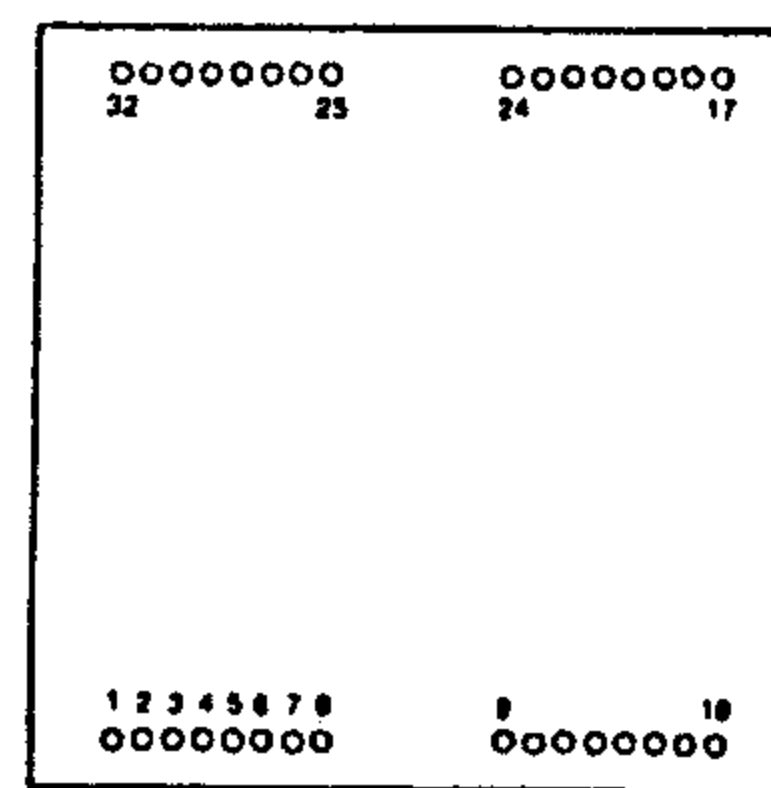
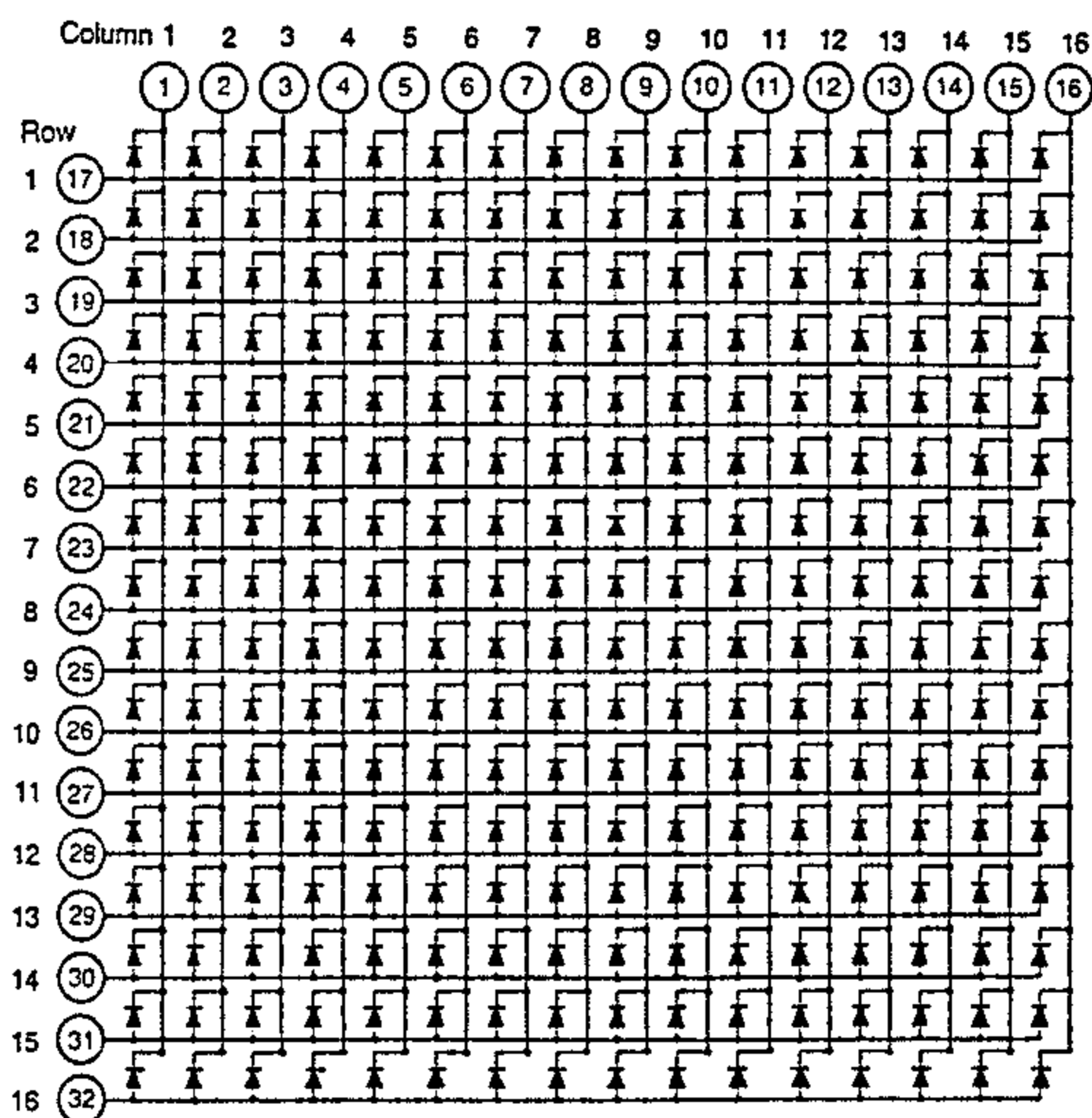
1. High brightness with high contrast
2. Wide angle viewing
3. Low power consumption
4. Solid state reliability

## PACKAGE DIMENSIONS

SCALE 1:1 (mm)



## PIN ARRANGEMENT (Top View)



SDM-3167

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### Red SDM 3167UR (GaAlAs)

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

Power dissipation/Total	2500	mW
Power dissipation/Dot	20	mW
Forward current	10	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/Dot	$V_F$	$I_F = 10\text{mA}$	—	1.9	2.1	V
Reverse current/Dot	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/Dot	$I_V$	$I_F = 10\text{mA}$	1300	2500	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 10\text{mA}$	—	660	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 10\text{mA}$	—	20	—	nm

### Orange SDM 3167SR (GaAsP/GaP)

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

Power dissipation/Total	2500	mW
Power dissipation/Dot	20	mW
Forward current	10	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/ Dot	$V_F$	$I_F = 10\text{mA}$	—	2.0	2.2	V
Reverse current/ Dot	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/Dot	$I_V$	$I_F = 10\text{mA}$	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 SDM 3167UG (GaP)

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

Power dissipation/Total	2500	mW
Power dissipation/Dot	20	mW
Forward current	10	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/Dot	$V_F$	$I_F = 10\text{mA}$	—	2.1	2.3	V
Reverse current/Dot	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/Dot	$I_V$	$I_F = 10\text{mA}$	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