

Part No. 3R4VC-A15M623 Spec No. Page 1 of 3

Features

- ◆ Low power consumption
- ◆ High efficiency
- ◆ Low current requirement
- ◆ Choice of various viewing angles
- ◆ Versatile mounting on P.C. Board or panel
- ◆ Reliable and robust
- Pb free
- ◆ The product itself will remain within RoHS compliant version

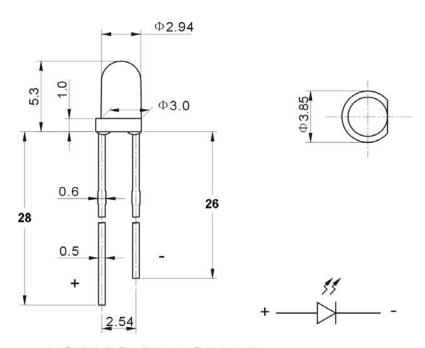
Descriptions

- ◆ The series is specially designed for applications requiring higher brightness.
- ◆ The led lamps are available with different colors, intensities.

Applications

◆ TV set ◆ Monitor ◆ Telephone ◆ Computer ◆ Circuit board.

Package Dimension:



NOTE:TOLERANCE±0.5mm

Part NO.	Material	Lens Color	Source Color
3R4VC-A15M623	AlGaAs/GaAs	Water Clear	Super Red

Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerances unless Dimension ±0.25mm.
- 3. An epoxy meniscus may extend about 1.5mm (0.059") down to the lead.

Part No.	3R4VC-A15M623	Spec No.		Page	1 of 3
----------	---------------	----------	--	------	--------

Absolute Maximum Ratings at Ta=25℃

Parameter	Symbol	MAX.	Unit
Power Dissipation	P_{d}	100 mW	
Peak Forward Current(1/10 Duty Cycle,0.1ms Pulse Width)	I _{FP}	200 mA	
Continuous Forward Current	l _F	30	mA
Reverse Voltage	V_{R}	5 V	
Operating Temperature Range	Topr	-40°C to +80°C	
Storage Temperature Range	Tstg	-40°C to +85°C	
Lead Soldering Temperature [4mm(.157") From Body]	Tsol	260℃ for 5 Seconds	

Electrical Optical Characteristics: at Ta=25℃

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Forward Voltage	V_{F}	1.9	2.0	2.4	V	I _F =20mA
Luminous Intensity	I _V	2300	2800		mcd	I _F =20mA
Dominant Wavelength	λ_{d}	620	625		nm	I _F =20mA
Peak Emission Wavelength	λ_{P}		630		nm	I _F =20mA
Spectral Line Half-Width	$\triangle \lambda$		30		nm	I _F =20mA
Reverse Current	I _R			10	μΑ	V _R =5V
Viewing Angle	θ		15		deg	I _F =20mA

Notes:

- 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- 2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3. The dominant wavelength (λ d) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

Part No. 3R4VC-A15M623 Spec No. Page



Typical Electrical/Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted) Wave Length(nm) Super Red@ λ_P = 630 Relative Emission Intensity 1.0 0.8 0.6 0.4 0.2 0.0400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 Iuminous Intensity vs Forward Voltage Vs **Ambient Temperature** Forward Current Relative Luminaus Intensity (%) 1000 50 Forward Current IF (mA) 40 100 30 VF=2.020 10 10 0 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 -20 20 40 0 Forward Voltage VF (V) Ambient Temperature Ta (°C) Iuminous Intensity vs Forward Current vs. Forward Current Ambient Temperature Relative Luminaus Intensity (%) 1000 50 Forward Current IF (mA) f=1KHz Duty=1/10 40 100 20 10 0 20 60 80 85 30 40 50 40 20 Ambient Temperature Ta (°C) Forward Current IF (mA) Relative Radiant Intensity vs. Angular Displacement 10 30 Relative Intensity 40 1.0 0.9 50 0.8 60 0.7 70 80 0.2 0.2 0

Beam Patter