Red Side-Emitting SMD LED (4 x 4 mm, 120° Viewing Angle)



OVSR9RBCR8

- Compact size allows use in space conscious devices
- Thin profile offers unlimited design flexibility
- · Long life span reduces maintenance cost
- Suitable for all SMT assembly methods
- Red (624 nm)



The **OVSR9RBCR8** is a side-looking red 4.0 mm x 4.0 mm 120° angle surface-mounted LED that can be used as a light source in many applications. Its compact size and thin profile offer maximum design flexibility, while its long life span reduces maintenance cost.

Applications

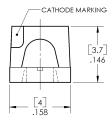
Optical indicators

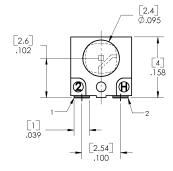
Moisture

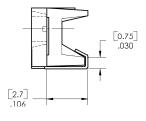
ATTENTION

- Coupling into light guides
- Back lights (LCD switches, keys, displays, illuminated advertising, general lighting)
- Interior automotive lighting (dashboard backlighting, etc.)
- Automotive applications
- Marker lights (e.g., steps, exit ways, etc.)
- Signal and symbol luminaire

Part Number	Material	Emitted Color	Intensity Typ. mcd	d Lens Color	
OVSR9RBCR8	AlGalnP	Red	400	Water Clear	







1 CATHODE 2 ANODE

DIMENSIONS ARE IN INCHES

DO NOT LOOK DIRECTLY
AT LED WITH UNSHIELDED
EYES OR DAMAGE TO
RETINA MAY OCCUR.

Red Side-Emitting SMD LED OVSR9RBCR8



Absolute Maximum Ratings

 $T_A = 25^{\circ} C$ unless otherwise noted

Storage Temperature Range	-40 ~ +100° C
Operating Temperature Range	-40 ~ +100 ° C
Junction Temperature	110°C
Junction/Ambient ¹	500 ° C/W
Junction/Solder Point	350° C/W
Reverse Voltage	5 V
Continuous Forward Current	50 mA
Peak Forward Current (10% Duty Cycle, PW ≤ 100 µsec)	200 mA
Power Dissipation	130 mW

Note:

1. Rth test condition: Mounted on PC board FR 4 (pad size≥16 mm²).

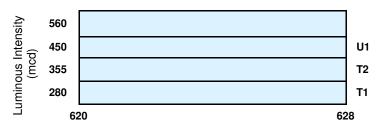
Electrical Characteristics

 $T_A = 25^{\circ}$ C unless otherwise noted

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I _V	Luminous Intensity	280	400		mcd	I _F = 20 mA
V_{F}	Forward Voltage		2.3	2.6	V	I _F = 20 mA
I _R	Reverse Current			10	μΑ	$V_R = 5 V$
λ_{D}	Dominant Wavelength	620	628	635	nm	I _F = 20 mA
2 Θ½	50% Power Angle		120		deg	I _F = 20 mA

Standard Bins (I_F = 20 mA)

Lamps are sorted to luminous intensity (I_V) and dominant wavelength (λ_D) bins shown. Orders for OVSR9RBCR8 may be filled with any or all bins contained as below.



Luminous intensity is at T1 bin or above.

Dominant Wavelength (nm)

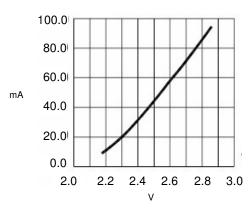
Notes:

- 1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
- 2. To designate luminous intensity ranks, please contact OPTEK.

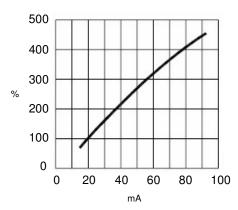
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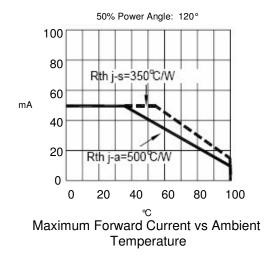
Typical Electro-Optical Characteristics Curves

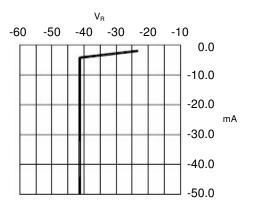


Forward Current vs Forward Voltage

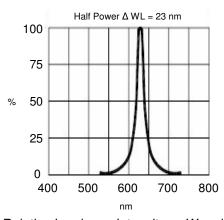


Relative Luminous Intensity vs Forward Current

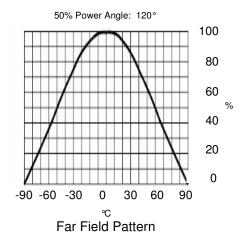




Reverse Current vs Reverse Voltage



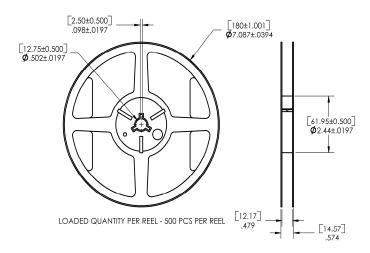
Relative Luminous Intensity vs Wavelength



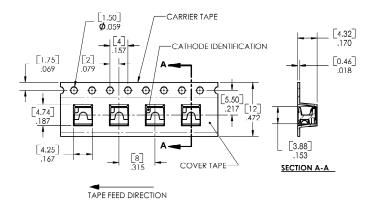
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Reel Dimensions: 7-inch reel



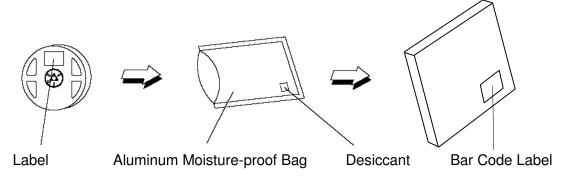
Carrier Tape Dimensions: Loaded quantity 500 pieces per reel



DIMENSIONS ARE IN INCHES AND [MILLIMETERS].

TOLERANCES ARE ±.0039 [0.1] UNLESS OTHERWISE SPECIFIED.

Moisture Resistant Packaging



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TT electronics:

OVSR9RBCR8