



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

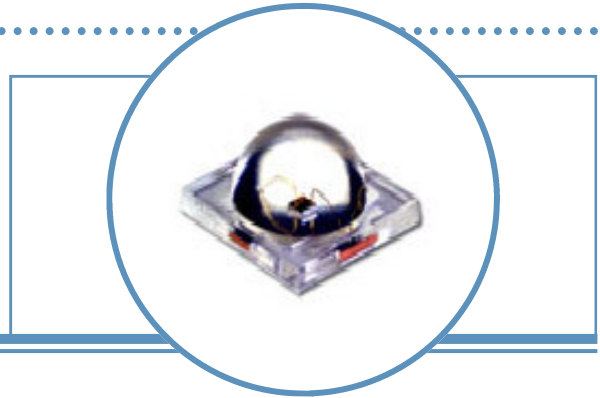
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



1-Watt SMD Amber LED Lamp (7mm)

OVSPAAC5R8

- High luminous flux output for illumination
- Exposed pad design for excellent heat transfer
- Designed for high current operation
- Reflow soldering applicable

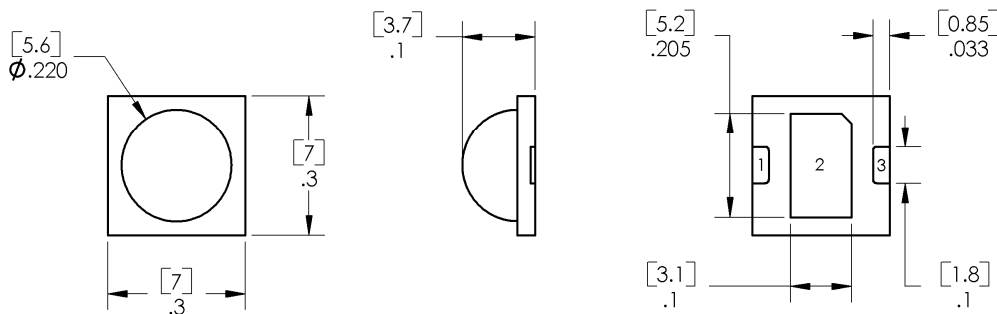


The OVSPAAC5R8 is designed to handle high current and heat and emits sufficient light for a variety of lighting and illumination applications. Small size and high power allow for compact and cost-effective lighting solutions.

Applications

- Automotive: Exterior and Interior Lighting
- Backlighting LCD Displays: Televisions and Computer Monitors
- Entertainment: Studios, Theaters, Nightclubs, Restaurants
- Accent Lighting: Wall Wash, Landscape, Spotlight
- Bicycle and Pedestrian Safety Lights

Part Number	Material	Emitted Color	Flux Typ. Im	Lens Color
OVSPAAC5R8	AllnGaP	Amber	35	Water Clear



1 ANODE 2 HEAT SINK 3 CATHODE

DIMENSIONS ARE IN INCHES AND [MILLIMETERS].



Data is subject to change without prior notice.

1-Watt SMD Amber LED Lamp (7mm)

OVSPAAC5R8



Absolute Maximum Ratings

$T_A = 25^\circ\text{C}$ (on metal core PCB¹) unless otherwise noted

Storage Temperature Range	-30 ~ +85 °C
Operating Temperature Range	-30 ~ +85 °C
Reverse Voltage	5 V
Continuous Forward Current	450 mA
Peak Forward Current (10% Duty Cycle, 1KHz)	700 mA
Power Dissipation	1.00 W
Junction Temperature	+115°C
Junction-to-case ²	20 °C/W

Notes:

1. Metal core PCB defined as good heat transmission substrate (thickness of 2.0mm Al-based PCB 20x20mm, $\Theta_{JC} < 15^\circ\text{C/W}$ could do)
2. Rth test condition: mounted on 2.0mm Al-based PCB 20x20mm

Electrical Characteristics

$T_A = 25^\circ\text{C}$ (on metal core PCB¹) unless otherwise noted

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
lumen	Luminous Flux	23	35	----	lm	$I_F = 450\text{mA}$
V_F	Forward Voltage	----	2.4	2.8	V	$I_F = 450\text{mA}$
I_R	Reverse Current	----	----	10	μA	$V_R = 5\text{V}$
λ_D	Dominant Wavelength	588	594	600	nm	$I_F = 450\text{mA}$
$2\ \Theta_{1/2}$	50% Power Angle	----	105	----	deg	$I_F = 450\text{mA}$

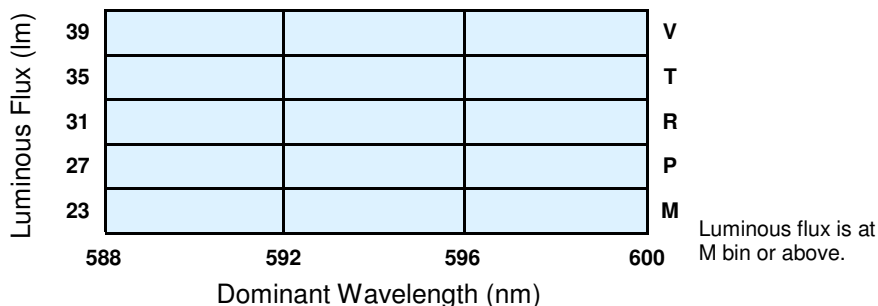
Notes:

1. Metal core PCB defined as good heat transmission substrate (thickness of 2.0mm Al-based PCB 20x20mm, $\Theta_{JC} < 15^\circ\text{C/W}$ could do)

Standard Bins ($I_F = 450\text{mA}$)

Lamps are sorted to luminous flux (Φ_V) and dominant wavelength (λ_D) and ranked as shown.

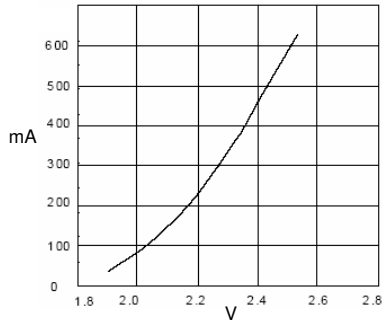
Orders for OVSPAAC5R8 may be filled with any or all bins contained as below.



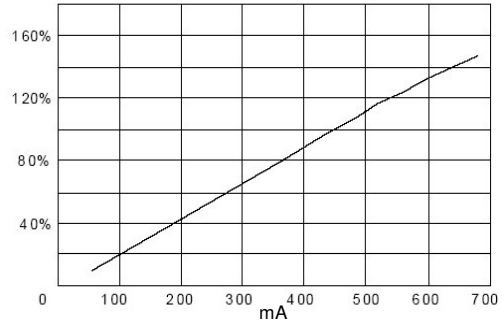
Important Notes:

1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
2. Pb content <1000PPM.
3. To designate luminous intensity ranks, please contact OPTEK.

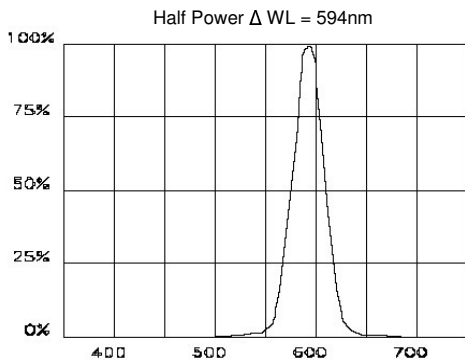
Typical Electro-Optical Characteristics Curves



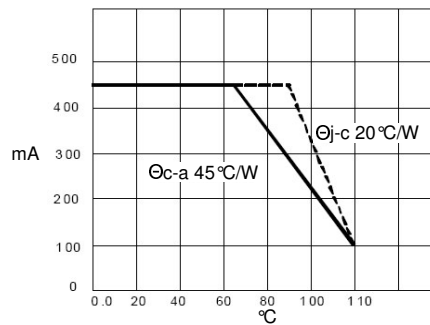
Forward Current vs. Forward Voltage



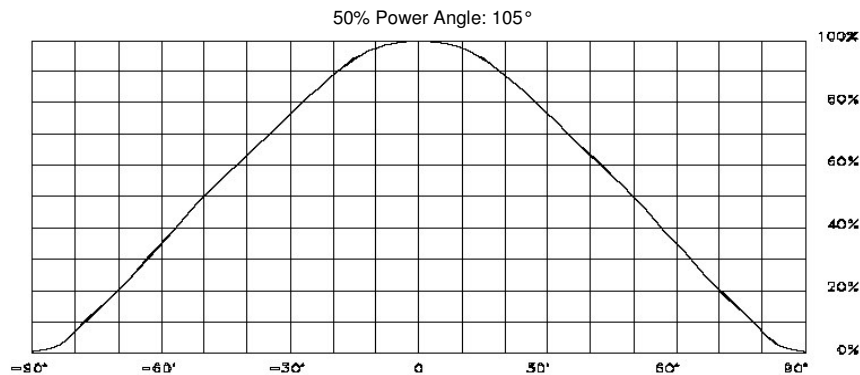
Relative Luminous Flux vs. Forward Current



Relative Luminous Intensity vs. Wavelength



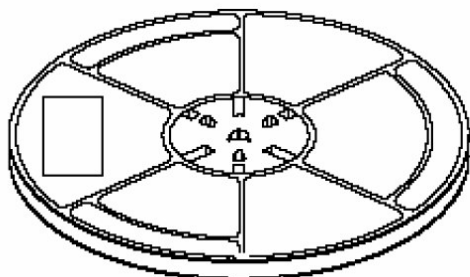
Maximum Forward DC Current vs. Ambient Temperature



Far Field Pattern

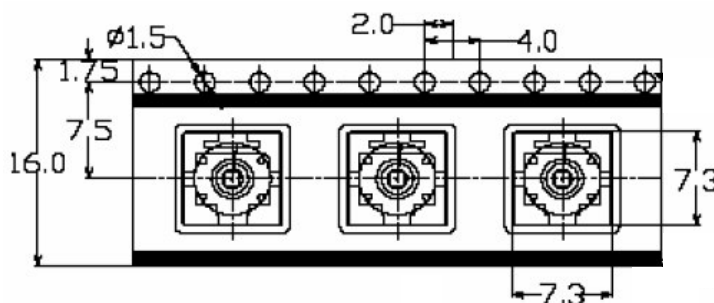
1-Watt SMD Amber LED Lamp (7mm) OVSPAAC5R8

Reel Dimensions (13 Inch)



REEL
(506-D0RREE-00)
(\varnothing 330x16mm)

Carrier Tape Dimensions: Loaded Quantity 1400 PCS per Reel



Moisture Resistant Packaging

