

# **CBT-39-UV LEDs**



### Introduction:

This document describes the binning and labeling nomenclature for CBT-39-UV Big Chip LED<sup>™</sup> product as well as the orderable bin kits for each part. With each build of parts, there is a distribution of performance in both power and wavelength. In order to guarantee specific performance for customers, each device is measured and subsequently grouped into power and wavelength bins. Each individual package or reel of parts contains only one combination of power and wavelength bin. Furthermore, bins are combined into orderable bin kits comprising a selection of power and wavelength bins to ease the ordering process.

# **Table of Contents**

Table of Products.....2

Bin Kit Ordering Nomenclature ......3

Power and Wavelength Binning Structure ......4

CBT-39-UV Bin Kit Ordering Codes ......5



# **Table of Products**

Products	Ordering Part Number	Description	
CBT-39-UV-C32 CBT-39-UV-C32-x123-22		CBT-39-UV consisting of a 3.9 mm <sup>2</sup> LED, a thermistor, connector, and a copper-core PCB.	



### **CBT-39-UV Bin Kit Ordering Nomenclature**

CBT-39-UV products are sold in sets of flux and chromaticity bins called bin kits. Each bin kit specifies a minimum power bin and a specific selection of wavelength bins. The ordering part number designation is as follows:

A B	<b>c</b> –	- 123 -	— DE -	— F45 —	— GH 6 7 8 —	- 90
Product	duct FamilyChip AreaColorPackage ConfigurationPower & Wavelength BinBin					Bin Kit Code
Product Family	<ul> <li>A - Package type: "C" denotes chip-on board</li> <li>B - Lens type: "B" denotes window (no lens)</li> <li>C - Chip quantity: "T" denotes single chip</li> </ul>					
Chip Area	<b>1 2 3</b> - Total LED chip area (mm²) x 10: "39" denotes 3.9mm²					
Color	D E - Color: "UV" denotes ultra violet					
Package Config.	<b>F 4 5</b> - Package configuration (Core Board dimension and connector descriptor)					
Power and Wavelength Bin	GH - Power Bin 6 7 8 - Wavelength bin					
Power and Wavelength Range	9 0 - Bin Kit Code					

#### Example:

3

The ordering part number CBT-39-UV-C32-DA400-22 refers to a CBT-39-UV emitter package, with a power level minimum of 4 Watts and 2 wavelength bins for a total wavelength range from 400 to 410 nm.



# **CBT-39-UV Binning Structure**

CBT-39-UV LEDs are tested and sorted into one of the following power (F) and wavelength (123) bins.

#### **Power Bins**

Color	Power Flux Bin (F)	Minimum Flux (W)	Maximum Flux (W)	
	DA	4.00	4.33	
	DB	4.33	4.67	
111/	DC	4.67	5.00	
UV	EA	5.00	5.50	
	EB	5.50	6.00	
	FA	6.00	6.50	

\*Note: Luminus maintains a +/- 6% tolerance on power measurements.

#### Wavelength Bins

Color	Wavelength Bin (123)	Minimum Wavelength (nm)	ngth Maximum Wavelength (nm)	
1117	400	400	405	
UV	405	405	410	



### **CBT-39-UV Bin Kit Order Codes**

The following tables describe the bin kit ordering codes for the CBT-39-UV. The power and wavelength bins included in the bin kit. Each kit specifies a minimum power and the listed wavelength. A maximum power is not specified. Within each kit, Luminus may ship any part meeting or exceeding the minimum power specification. Shipments will always meet the listed wavelength bin's range. For information on ordering bin kits not listed below, please contact Luminus or an official distributor.

Color	Bin Kit Code	Power (W)	Wavelength (nm)	
		Min	Min.	Max.
UV	DA400-22	4.0	400	410
	EA400-22	5.0	400	410

The products, their specifications and other information appearing in this document are subject to change by Luminus Devices without notice. Luminus Devices assumes no liability for errors that may appear in this document, and no liability otherwise arising from the application or use of the product or information contained herein. None of the information provided herein should be considered to be a representation of the fitness or suitability of the product for any particular application or as any other form of warranty. Luminus Devices' product warranties are limited to only such warranties as accompany a purchase contract or purchase order for such products. Nothing herein is to be construed as constituting an additional warranty. No information contained in this publication may be considered as a waiver by Luminus Devices of any intellectual property rights that Luminus Devices may have in such information. Big Chip LEDs<sup>TM</sup> is a registered trademark of Luminus Devices, Inc., all rights reserved.

This product is protected by U.S. Patents 6,831,302; 7,074,631; 7,083,993; 7,084,434; 7,098,589; 7,105,861; 7,138,666; 7,166,870; 7,166,871; 7,170,100; 7,196,354; 7,211,831; 7,262,550; 7,274,043; 7,301,271; 7,341,880; 7,344,903; 7,345,416; 7,348,603; 7,388,233; 7,391,059 Patents Pending in the U.S. and other countries.

5