

CBT-39-UV LEDs



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Introduction:

This document describes the binning and labeling nomenclature for the CBT-39-UV 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 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 ² 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 C —	— 123 —	— DE –	— F45 —	— GH 6 7 8 —	90
Product Family	Chip Area	Color	Package Configuration	Power & Wavelength Bin	Bin Kit Code

Product Family	A - Package type: "C" denotes chip-on board B - Lens type: "B" denotes window (no lens) C - Chip quantity: "T" denotes single chip		
Chip Area	I 23 - Total LED chip area (mm²) x 10: "39" denotes 3.9mm²		
Color	D E - Color: "UV" denotes ultra violet		
Package Config.	F 4 5 - Package configuration (Core Board dimension and connector descriptor)		
Power and Wavelength Bin	GH - Power Bin 6 7 8 - Wavelength bin		
Power and Wavelength Range	90 - Bin Kit Code		

Example:

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 Bins¹

Color	Power Flux Bin (F)	Minimum Flux (W)	Maximum Flux (W)
	DA	4.00	4.33
	DB	4.33	4.67
	DC	4.67	5.00
	EA	5.00	5.50
UV	EB	5.50	6.00
	FA	6.00	6.50
	FB	6.50	7.00
	GA	7.00	7.50
	GB	7.50	8.00

Note 1: Luminus maintains a +/- 6% tolerance on power measurements.

Wavelength Bins

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

CBT-39-UV Bin Kit Order Codes

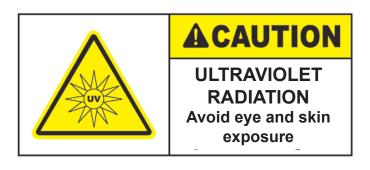
The following tables describe the bin kit ordering codes for the CBT-39-UV and the power and wavelength bins included in the bin kit. Each kit specifies a minimum power and the listed wavelength. A maximum power is not specified. Within each kit, Luminus may ship any part meeting or exceeding the minimum 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
UV	EA400-22	5.0	400	410
	FA400-22	6.0	400	410



History of Changes

Rev	Date	Description of Change
PDS-002170 Rev 04	05/26/2017	Add higher flux bins. Move ordering information to page 4



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