

Date: June 10, 2013

#### **Objective**:

- Notify customers of an improved window design for CBT-120-UV, CBT-90-UV and CBT-39-UV
- Notification of pending product part number change

Dear Valued Luminus Customer:

Luminus is pleased to announce an enhancement to the windows used on products CBT-120-UV-C11, CBT-90-UV, and CBT-39-UV parts. The new window material is more resistant to damage from high power UV light. The new design is smaller and matches the die area more closely. The device flux and wavelength performance have not changed. And finally the new window is virtually identical in overall dimension to the current design.

Please note no performance specifications have changed with regard to the new window. The only change is a revised product part number and a slight reduction in total window height. The older window designs are being discontinued immediately and all orders will be converted to the new window design. New orders will be accepted for the new design only.



### CBT-120-UV-C11

Figure 1. Close up view showing the window area for a CBT-120-UV-C11 device. The top picture is the current design; the bottom picture is the new design. Note the slight difference in area size.



Aside from the physical appearance difference in the drawings above, the dimensional difference is shown in the figure and table below.



Figure 2. Cross section showing the CBT-120 window on top of the metal substrate.

Dimension Name	Description	Original Window Dimension (mm)	New Window Dimension (mm)
"A"	Top of metal substrate to top of window	0.95	0.93
"В"	Top of emitting area to top of window	0.67	0.64

## CBT-120 Window Height Dimension

## New CBT-120 Part Numbering Scheme

Current Part Number	New Product Part Number
CBT-120-UV-C11-M382-22	CBT-120-UV-C31-M382-22
CBT-120-UV-C11-N382-22	CBT-120-UV-C31-N382-22
CBT-120-UV-C11-P382-22	CBT-120-UV-C31-P382-22

#### CBT-90-UV-C11



Figure 3. Close up view showing the window area for a CBT-90-UV-C11 device. The top picture is the current design; the bottom picture is the new design. Note the slight difference in area size.

Aside from the physical appearance difference in the drawings above, the dimensional difference is shown in the figure and table below.



Figure 4. Cross section showing the CBT-90 window on top of the metal substrate.



# **CBT-90 Window Height Dimension**

Dimension Name	Description	Original Window Dimension (mm)	New Window Dimension (mm)
"A"	Top of metal substrate to top of window	0.95	0.93
"В"	Top of emitting area to top of window	0.67	0.64

### New CBT-90 Part Numbering Scheme

Current Part Number	New Product Part Number
CBT-90-UV-C11-FB400-22	CBT-90-UV-C31-FB400-22
CBT-90-UV-C11-GA400-22	CBT-90-UV-C31-GA400-22
CBT-90-UV-C11-GB400-22	CBT-90-UV-C31-GB400-22

#### <u>CBT-39-UV</u>

Changes to the CBT-39-UV will be similar to the CBT-90. The change in appearance is shown with the CBT-90 graphics in Figure 3. The dimensional change will also be minor. Exact dimensions will be available when an updates data sheet is released.

### New CBT-39 Part Numbering Scheme

Current Part Number	New Product Part Number	
CBT-39-UV-C21-DA382-22	CBT-39-UV-C32-DA382-22	
CBT-39-UV-C21-CA400-22	CBT-39-UV-C32-CA400-22	

**Background:** UV light can damage all manner of materials. To improve the integrity for the protective window covering the UV die Luminus has introduced a new material. The new material has also allowed Luminus to streamline the window design for all UV products. While the new windows have no impact on performance, the part numbers have been changed to differentiate the new design from the previous one.

Best regards,

Product Marketing Management Team Luminus Devices