



APPLICATION NOTES

Light ring (halo) | etherCON & XLR Chassis



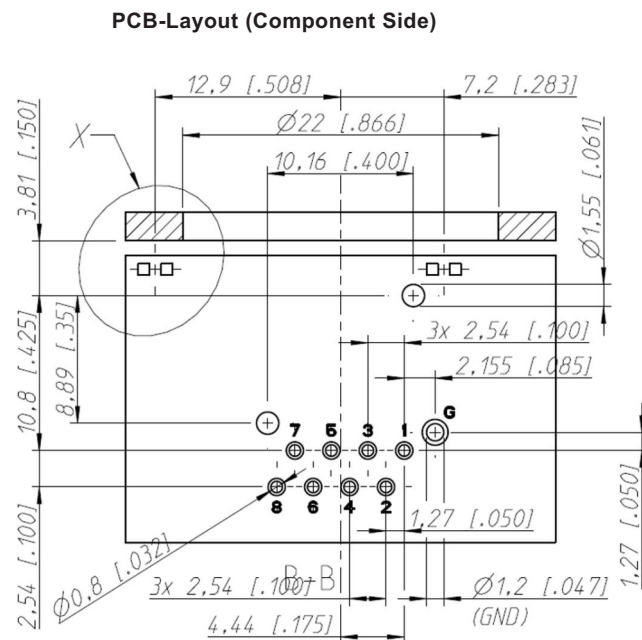
Light ring (halo) products require that LEDs be installed in PCBs according to the guidelines provided in this document.

Pay close attention to the crosstalk (light bleeding) requirement discussed at the end of this document.

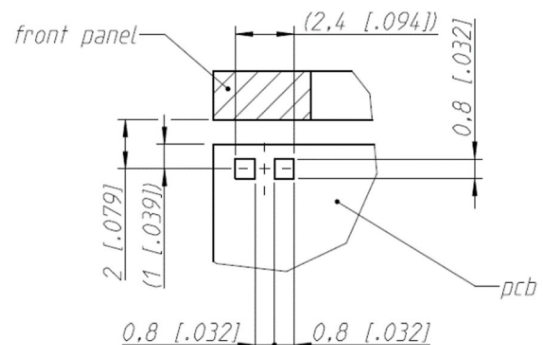
1 PCB Layout

- ▶ The following PCB layouts shows LED placement.
- ▶ Compared to the corresponding Neutrik parts without light rings (NE8FAH, NC5FAH, etc.), no changes are required to the PCB layout beyond placing the two LEDs as shown.
- ▶ This allows for easy updating of existing designs.

■ etherCON - NE8FAH-LR-DAE

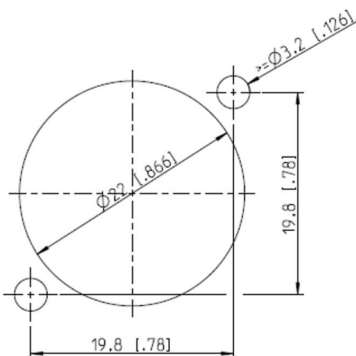


Detail X: LED size: 0603 (max. height: 0.8 mm)
5:1 Recommended solder pad layout:

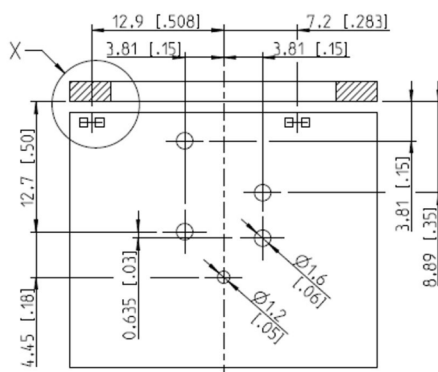


■ XLR - NC3FAH2-LR-DAE

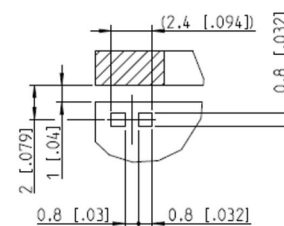
Panel cut out (rear side)



PCB-Layout (component side)

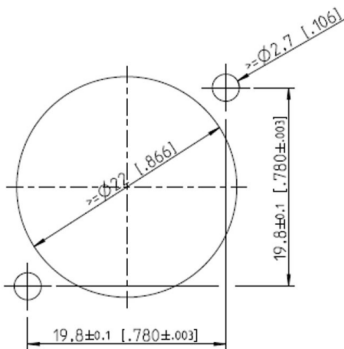


Detail X: LED size: 0603 (max. height: 0.8 mm)
5:1 Recommended solder pad layout:

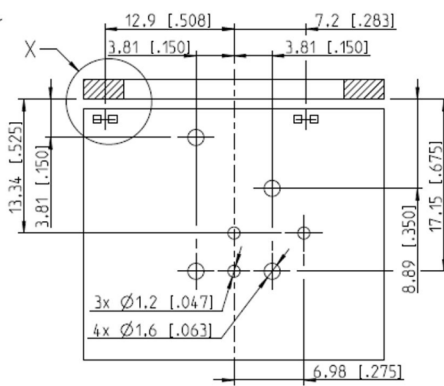


XLR - NC5FAH2-LR-DAE

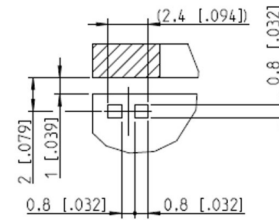
Panel cut out (rear side)



PCB-Layout (component side)



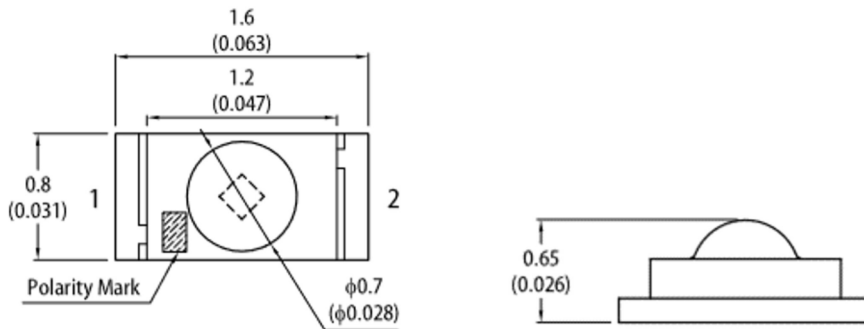
Detail X: LED size: 0603 (max. height: 0.8 mm)
5:1 Recommended solder pad layout:



2 LED Recommendation

LED size 0603 (Max height 0.8 mm)

Package Dimensions:



LED Recommendation List (Examples)

A APHD1608LSURCK

<https://www.mouser.at/ProductDetail/Kingbright/APHD1608LSURCK?qs=AQIKX63v8RvwTLDG%2F6aYFA==>



B APHD1608LCGCK

<https://www.mouser.at/ProductDetail/Kingbright/APHD1608LCGCK?qs=AQIKX63v8RvqPbV1LDSVuw==>



C APHD1608LSURCK

<https://www.mouser.at/ProductDetail/Kingbright/APHD1608LSURCK?qs=AQIKX63v8RvwTLDG%2F6aYFA==>



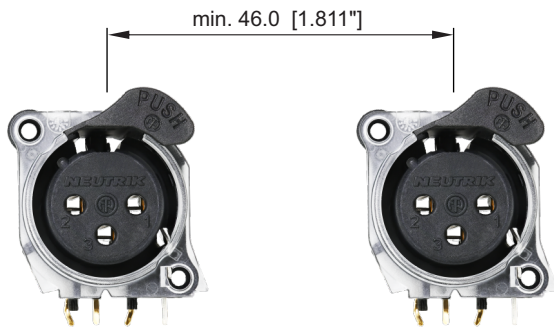
D APHD1608LSYCK

<https://www.mouser.at/ProductDetail/Kingbright/APHD1608LSYCK?qs=AQIKX63v8RsjjDpukaJ8Q==>



3 Light Bleed (Crosstalk) Requirements

- To avoid unwanted light bleed (crosstalk) between adjacent chassis connectors, either:
 1. At least double the standard distance between chassis connectors:
Use a 46 mm spacing rather than the typical 23 mm distance.
 2. Place some type of light barrier in between the chassis connectors.



C More Information on the www.neutrik.com

www.neutrik.com



etherCON halo



XLR halo



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