### **EARRING TECH STUFF**

#### **QUESTIONS**

Clearance for resistors/battery holder?

How to remove battery in design?

Standardize width and height is 23mm to big awkward? Find good proportion Should reposition batt/ cover for easier access? Or will square hoop solve problem?

## **DESIGN DECISIONS/NOTES**

In AI keep assets layer for working with paths before compounding them

Gold color fec248

Copper color#b87333

FR4 color D8D850

Build layer file in illustrator

Make sure silk screen is clean

SHRINK TSTOP by like .5mm to keep from having copper outline

Make sure switch is the same on (to the right like devil change alien)

Copper clearance to edge

Change ALIEN hole to 1.5mm from 2mm on laser cut file after cutting front plates All LEDs 0805

Jewelry holes 2mm hole or 1.5mm drill/2mm annular and via to ground

~.25-.5mm clearance from hole to dimension

.35mm traces unless not able for routing

.254 vias for OSH Park .3 vias for PCBWAY

Vias covered with solder mask on back

All components except lights on back

Full solder mask on back

Exposed copper front

Gold plating

White silk screen

2-6 LEDS depending on design

.8mm board thickness

LASER CUTTING 30w epilogue
Put black paper under to stop reflections
CUT 8s 100p 5000hz

DIMENSIONS/MECH TECH SPECS Laugh 
25mm width 23mm height

Heart eyes 😍 23mm width 23mm height

Angel 23mm width 23.5mm height

Devil 25mm width 23.6mm height 3.75g (acrylic and hoops) 2.5g (hoops)

Alien 9 20.5mm width 24.5mm 2.35g (hoops)

Cry 6 22.6mm width 22.6mm height (redo?)

23mm width 23 height

# **ECO**

- -On all gold faces maybe do not make ground just make it a NC so no possibility of short to ground\*\*\*
- -On angel make it so fr4 is exposed on back
- -On earrings w/o face plates order them 1.6mm thickness better feel
- -Make all vias as small as OSH Park limit
- -Be careful with exposed gold plated surfaces its really hard to assemble that way
  - -make copper pour and pad clearance excessive
  - -if possible include silkscreen or solder mask around pads
- -Skull: get rid of gold teeth version
- -Skull: move down resistor as far as possible from the battery holder
- -Texas: more clearance around copper pour?
- -Texas: make face plate no connect if not already

## **ILLUSTRATOR NOTES**

object> Expand appearance > expand to turn path into two paths from one path stroke