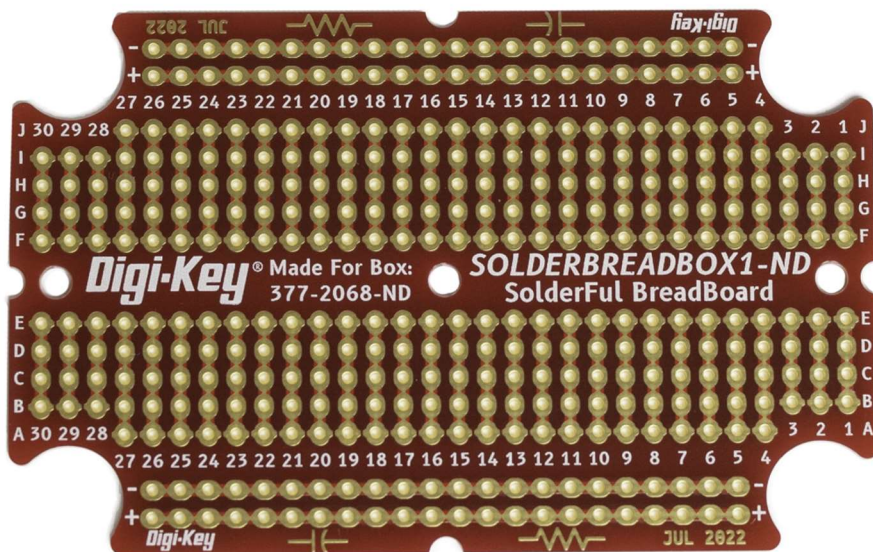




## SOLDERBREADBOX1-ND

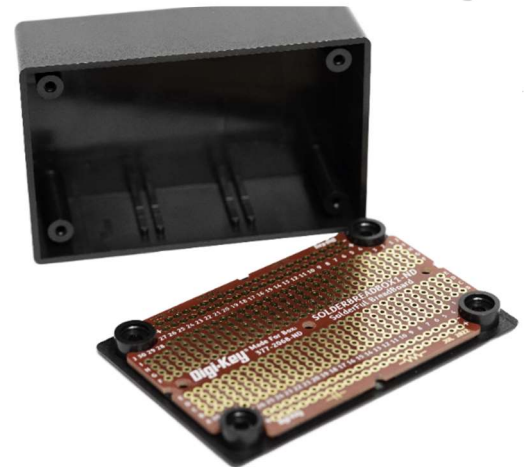
A Variant of the Original [SOLDERBREAD#02-ND](#)  
Made Specifically for the Box [377-2068-ND](#) from Bud Industries



**Back Side Shown**  
**[Numbers are Reversed to Match the Front]**



**[BOX SOLD SEPERATLY]**



Plating	ENIG [Nickel Plated Gold] Plated Through Hole [PTH]
Pitch	0.1" [2.54mm]
Solder Hole Diameter	0.04" [1.00mm]
Mounting Hole Diameter	0.12" [3.00mm]
Size / Dimension	3.13"L x 1.97"W [79.6mm x 49.9mm]
Board Thickness	0.063" [1.60mm]
Material	FR4 Epoxy Glass

**Page 2 Board and Mounting Hole Dimensions**

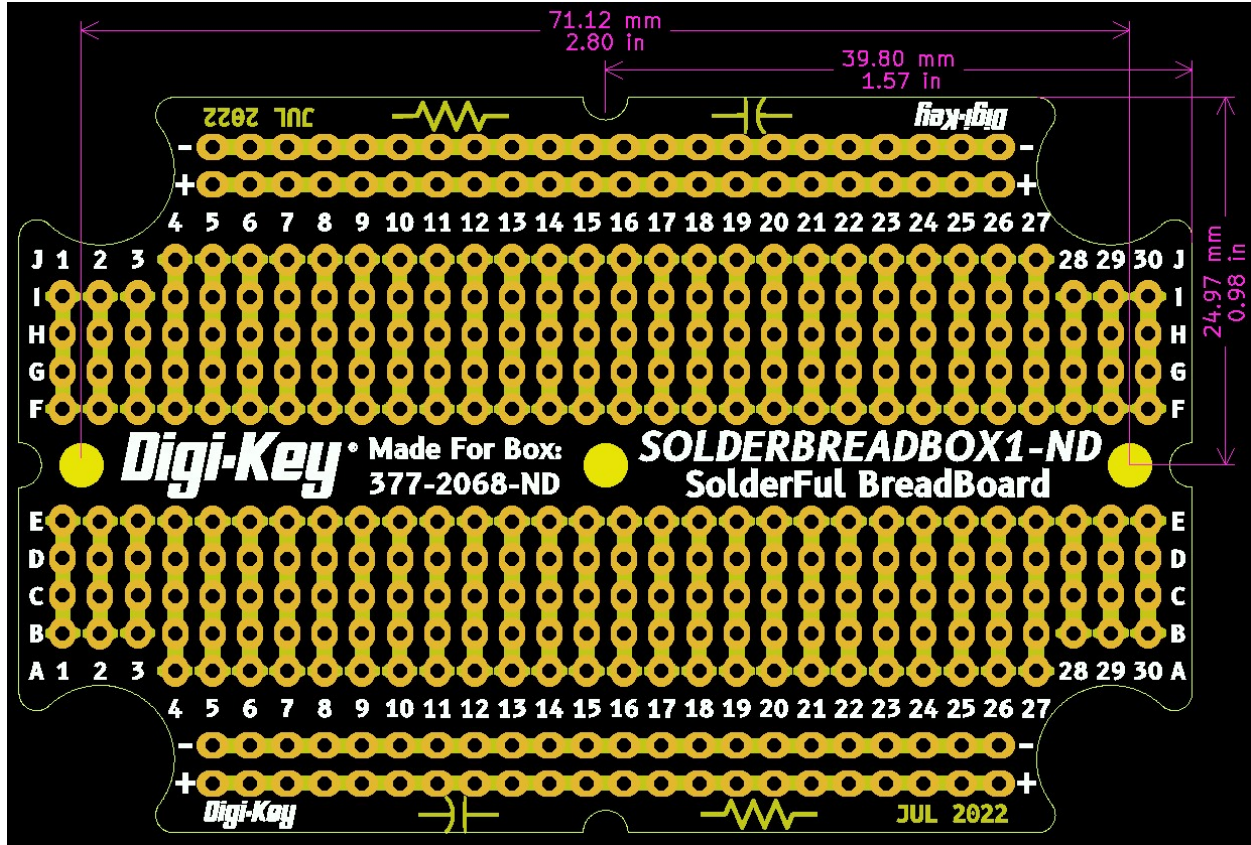
**Page 3 Dimensions of SMT & Regular Pad Gaps and LED Example**

**Page 4 The Cast of Parts Used**

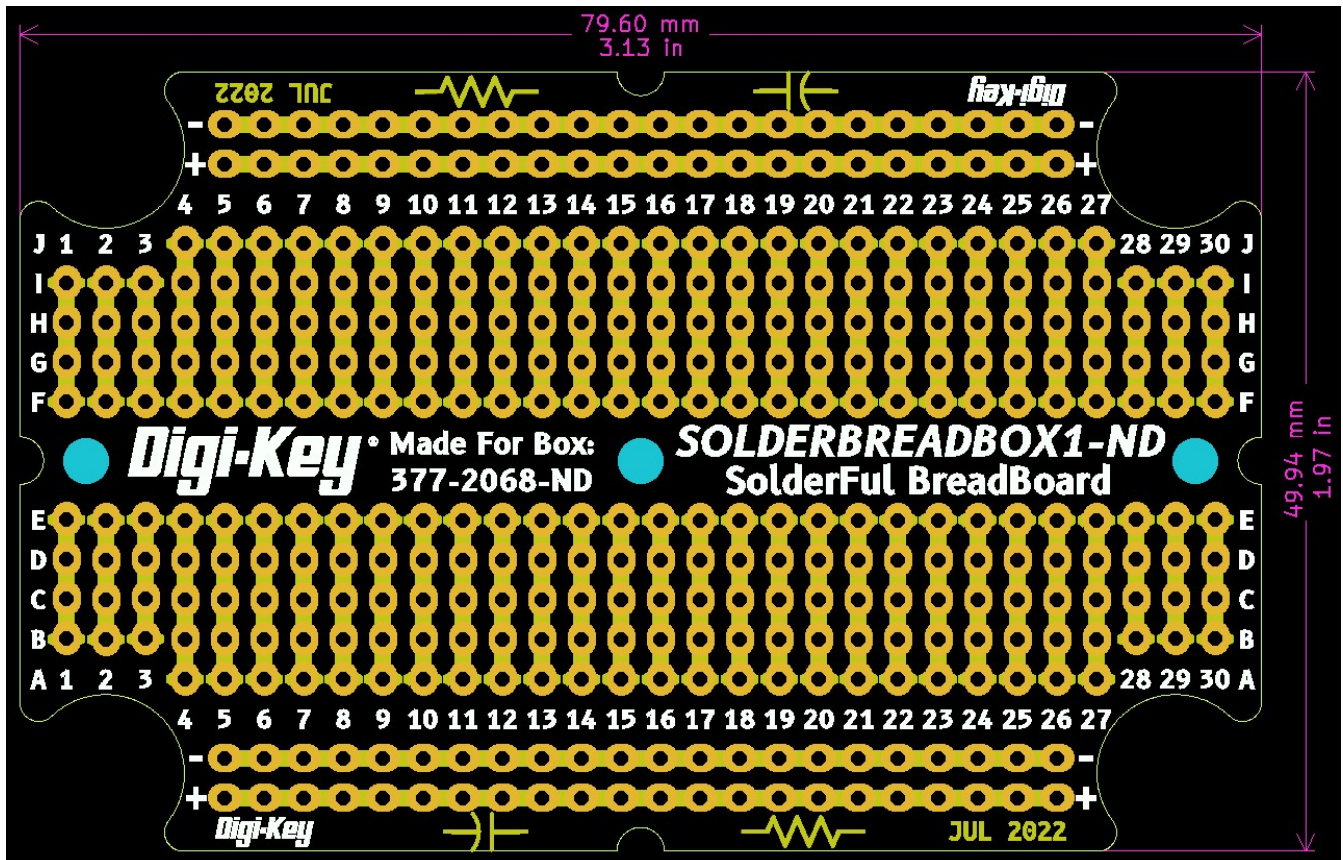
**Page 5 How to Solder Two Terminal SMT Parts**



### Center Mounting Holes are 3mm Diameter

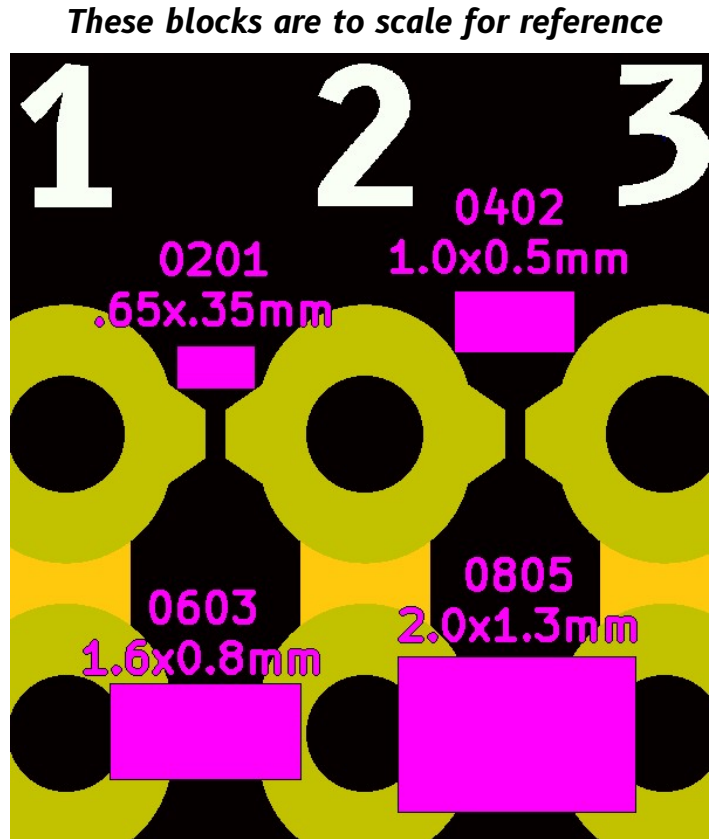
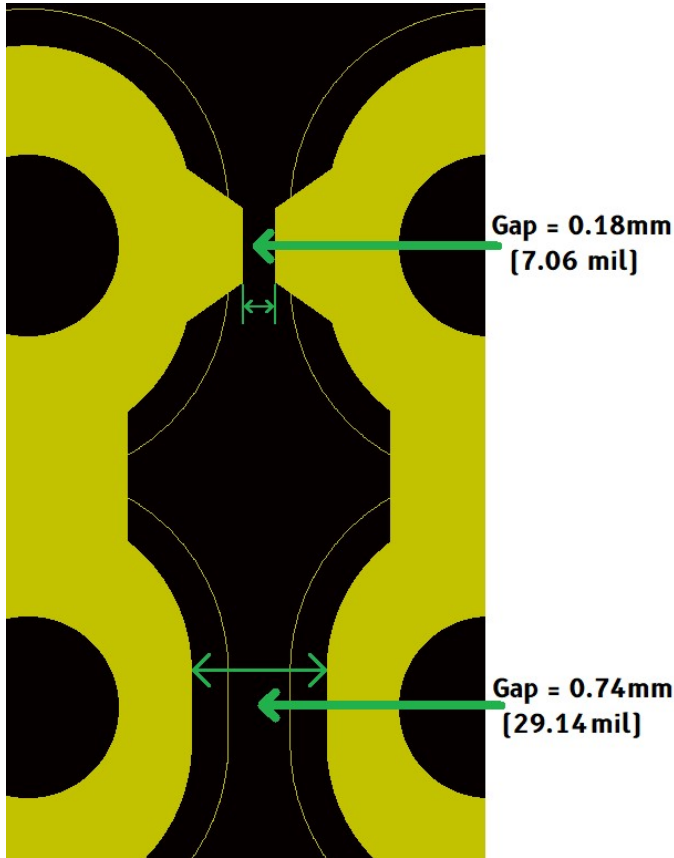


### Overall Dimensions



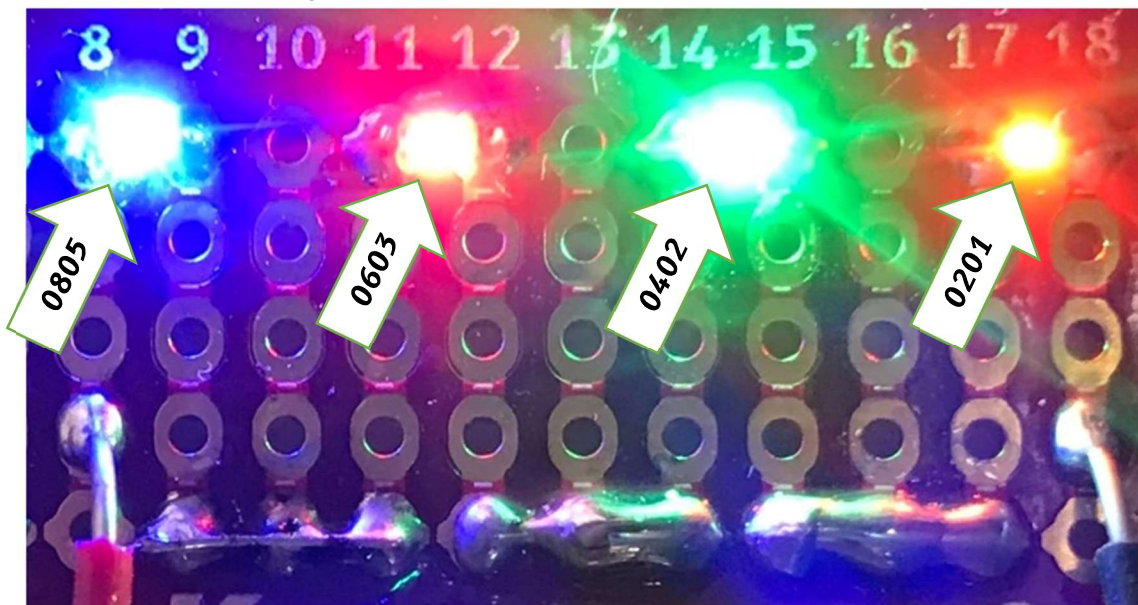
**Surface Mount (SMT) size 0201 and larger.**

**Bridge neighboring nets using the special pads at each end of the numbered nets.**



**These LEDs were hand soldered as a test.**

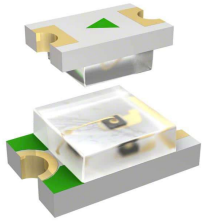
- *Hand Soldering 0201 parts should be avoided, but it can be done.*



**The LEDs were powered in series at 10mA**



# Parts used:



## 0805 [2012 Metric]

[732-4982-1-ND](#)

Blue – 3.2V (Typ) – 2.00mm x 1.25mm

## 0603 [1608 Metric]

[3147-B1911USD-20D000114U1930CT-ND](#)

Red – 2V (Typ) – 1.60mm x 0.80mm



## 0402 [1005 Metric]

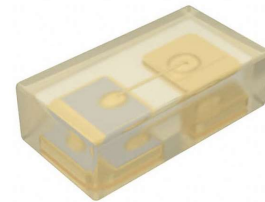
[732-11990-1-ND](#)

Green – 3.2V (Typ) – 1.00mm x 0.50mm – Very bright, even at 1 mA

## 0201 [0603 Metric]

[754-2027-1-ND](#)

Orange – 2V (Typ) – 10mA – 0.65mm x 0.35mm



## A Bonus LED

- Lit in series at 5mA

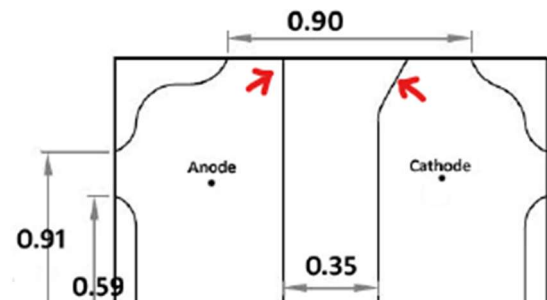


[1214-MP-1616-2103-PGCT-ND](#)

A 6V (Typ) 'Green' (Created by down-converting blue via phosphor like white LEDs are made)

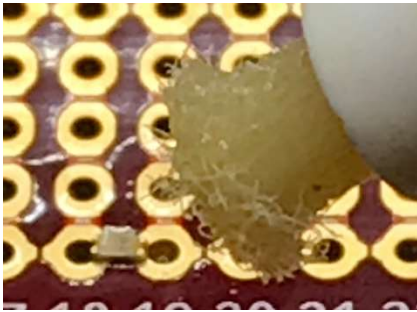
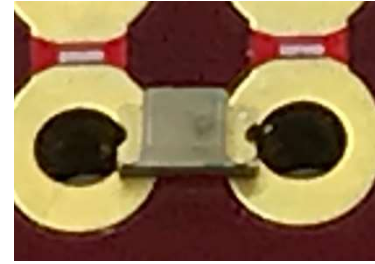
At 148lm/W, this little 1.60mm<sup>2</sup> package puts out a lot of green-white light, so even with a few milliamps; it can be a unique indicator.

Be warned- their polarity markings are not obvious ➡



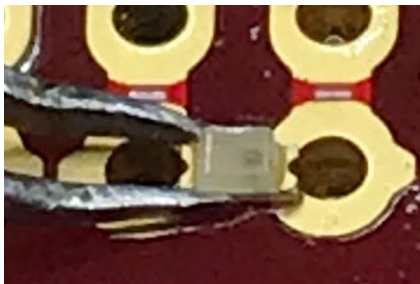
# How to Solder Two Terminal SMT Parts:

- 1. Place your part on pads  
[0603 used here]**



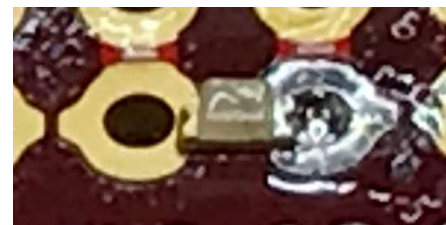
- 2. Add flux to one side of part and pad**

- 3. Add solder to your iron**



- 4. Hold the part with tweezers**

- 5. Touch iron to 'fluxed' pad**



- 6. Turn board around and repeat.  
7. Clean flux off**



**0201 shown for scale next to the  
Registered Trademark symbol  
on the board.**