



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



**SERIES 83**  
Unsealed, .500" Centers

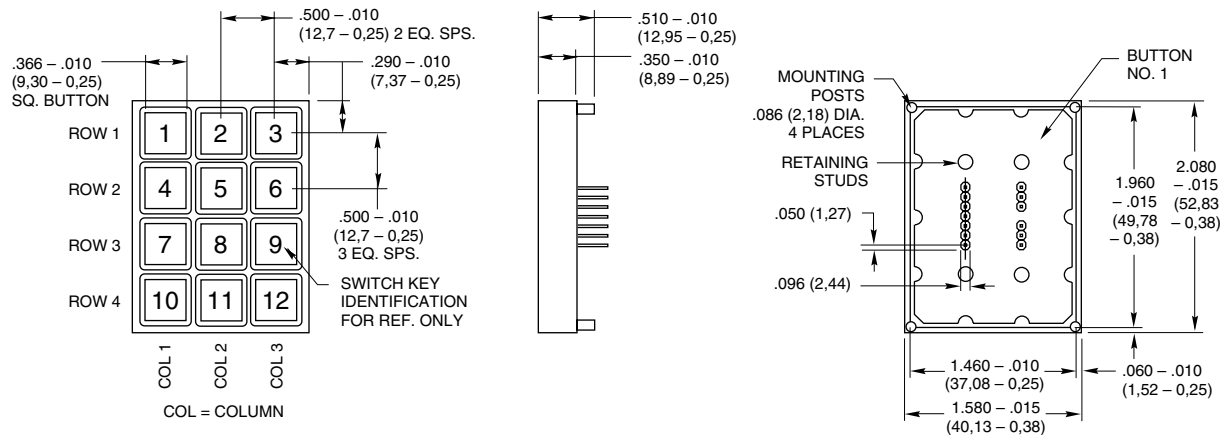
**FEATURES**

- 1/2" Button Centers
- Post Mounted
- Mount by Grooveless Retaining Ring or Heat Upset Post
- Snap-Dome Contact Provides Positive Feedback



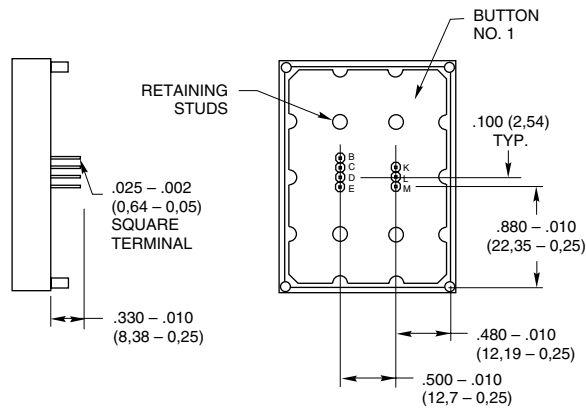
**DIMENSIONS** in inches (and millimeters)

**3x4 Keyboard**

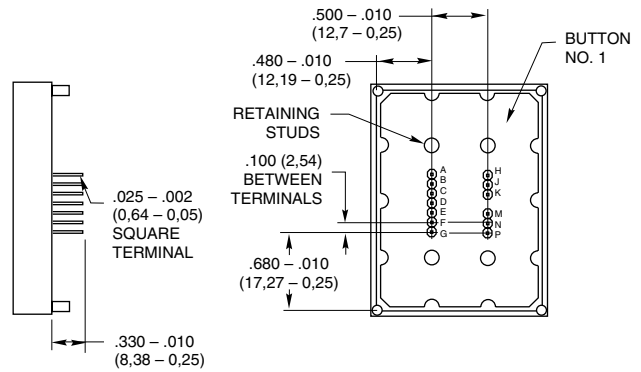


**Termination** in inches (and millimeters)

**3x4 Matrix Output**



**Single Pole/Common Bus**









### INSERTABLE LEGEND SHEETS

For use with -101 or -001 legend option. Legends are die cut to fit button surface when cap is removed. Dry transfer legends offer some flexibility to customize the blank inserts included on the sheet of popular legend letters, words and symbols provided or on the insertable legends sheet.

Description	Part No.
Sheet of Legend Inserts	<b>87AC2046</b>
Dry Transfer Lettering, Small	<b>87-DT-2096-088</b>
Dry Transfer Lettering, Medium	<b>87-DT-2096-125</b>
Dry Transfer Lettering, Large	<b>87-DT-2096-187</b>

For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.

### PRINTED LEGENDS For Maximum Versatility

Printing allows you the flexibility to create your own legend using whole words and symbols with various type styles. Durable epoxy ink printing bonds to the button cap surface. There are two types of button cap printing:

**Top Surface Printing:** Legend is applied directly to the top of the button. Button is recessed slightly below the keyboard housing.

**Sub-Surface Printing:** For insertable legend models. Provides maximum wear for printed surfaces. Printed internal button cap is protected by clear snap-on cap.

**Printed Typestyles:** The typestyle chart illustrates type style, size and approximate character limits for button caps. Grayhill's library of typefaces includes most popular legends.

Type No. and Typical Height	Sample Style and Typical Sizes	Sub Surface Character and Line Limitations	Top Surface Character and Line Limitations
<b>4GH088</b> .083"	ABCDEFGH	4 Characters 2 Lines 	4 Characters 2 Lines 
<b>1GH125</b> .138"	ABCDE	3 Characters 1 Line 	3 Characters 1 Line 
<b>3GH187</b> .207"	ABCD	2 Characters 1 Line 	2 Characters 1 Line 
<b>2GH250</b> .276"	ABC	N/A N/A	2 Characters 1 Line 

### ORDERING INFORMATION:

#### Special Legends

Follow this procedure:

- 1. Basic Keyboard.** Formulate the part number with the exception of the legend suffix.
- 2. Mounting.** Standard mounting is shown in our dimensional drawings. These drawings relate the terminal location to the button legend orientation. It is possible to rotate the button legends by 90°, changing the orientation. When mounting the keypad, it would be rotated 90° to have the legends appear upright. A 3x4 keypad thus becomes a 4x3.
- 3. Color.** Many colors, other than our standard black housing, are available. Buttons can be made from equivalent plastic in black, red, green, blue and yellow. White legends are used with dark color buttons, black with light ones. Other colors available on special order.
- 4. Buttons.** Legends can be printed on button surface and protected by a snap-on cap in a similar fashion to our insertable legend types. A second option is printing a 'blank' button. (One that has the same dimensions as a molded-in legend button with a flat top surface.) Disadvantage is legend wear over time. A third option is molded-in legends, usually requiring tooling. Molded buttons are available with a flat or concave top surface.
- 5. Legends.** Specify the legend requirements for each button. Identify buttons per our dimensional drawings. Caution if keypad has been rotated.

### ORDERING INFORMATION

**83AB1-103**

- Grayhill Series Number**
- Size Option**  
A = 3x4  
B = 4x4
- Circuitry Option**  
B1 = Matrix code  
C1 = Single pole/common bus
- Standard Legend Choices**  
3x4 Size: -101, -102 or -103  
4x4 Size: -001, -002, -003, -004, -005 or -006

**Available from your local Grayhill Distributor.** For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.