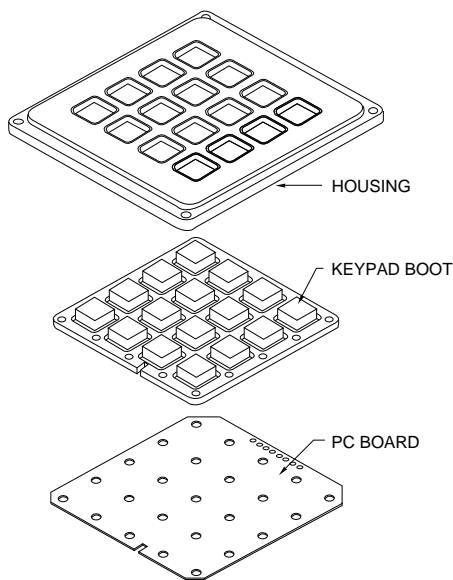


## SERIES 96

### FEATURES

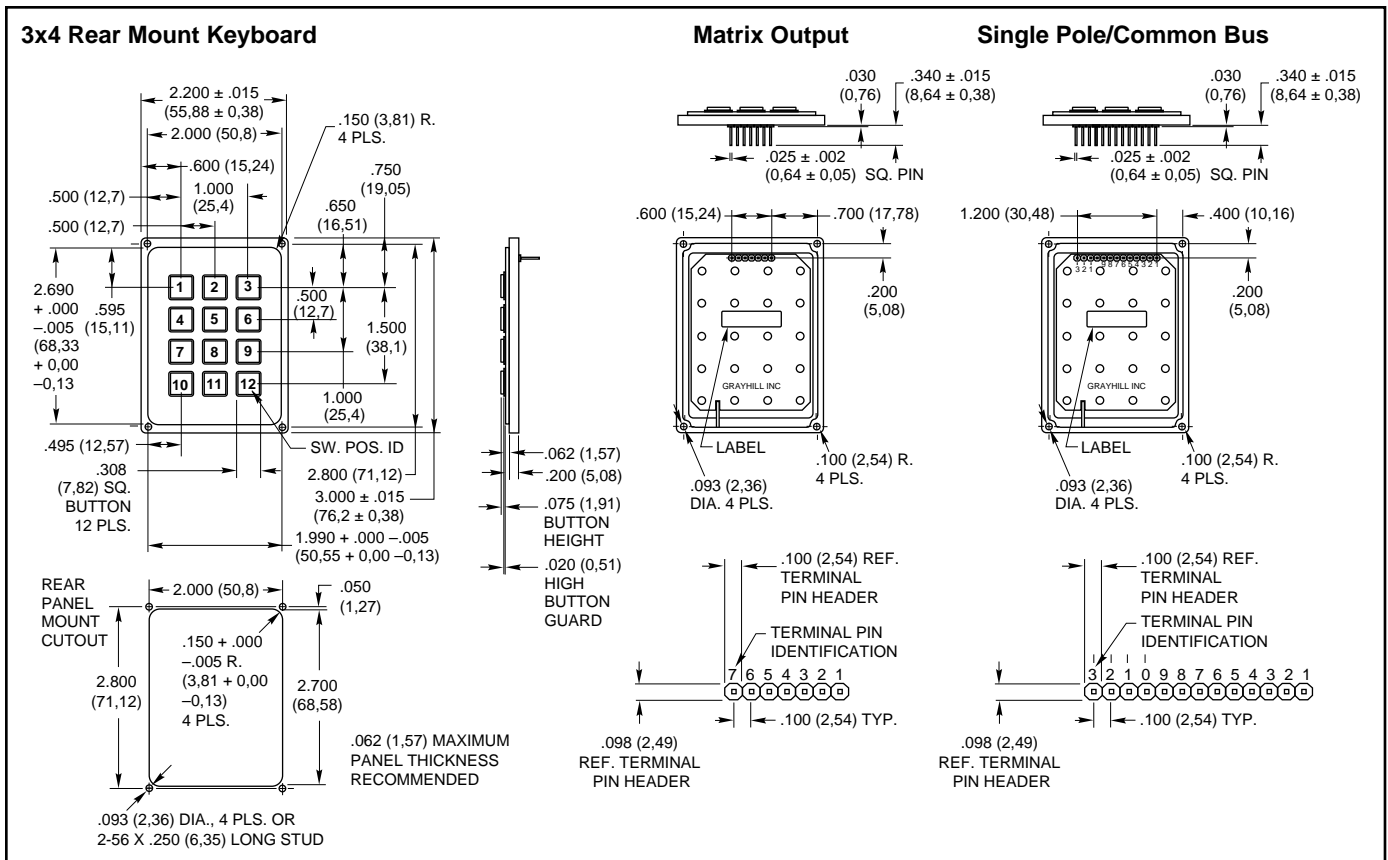
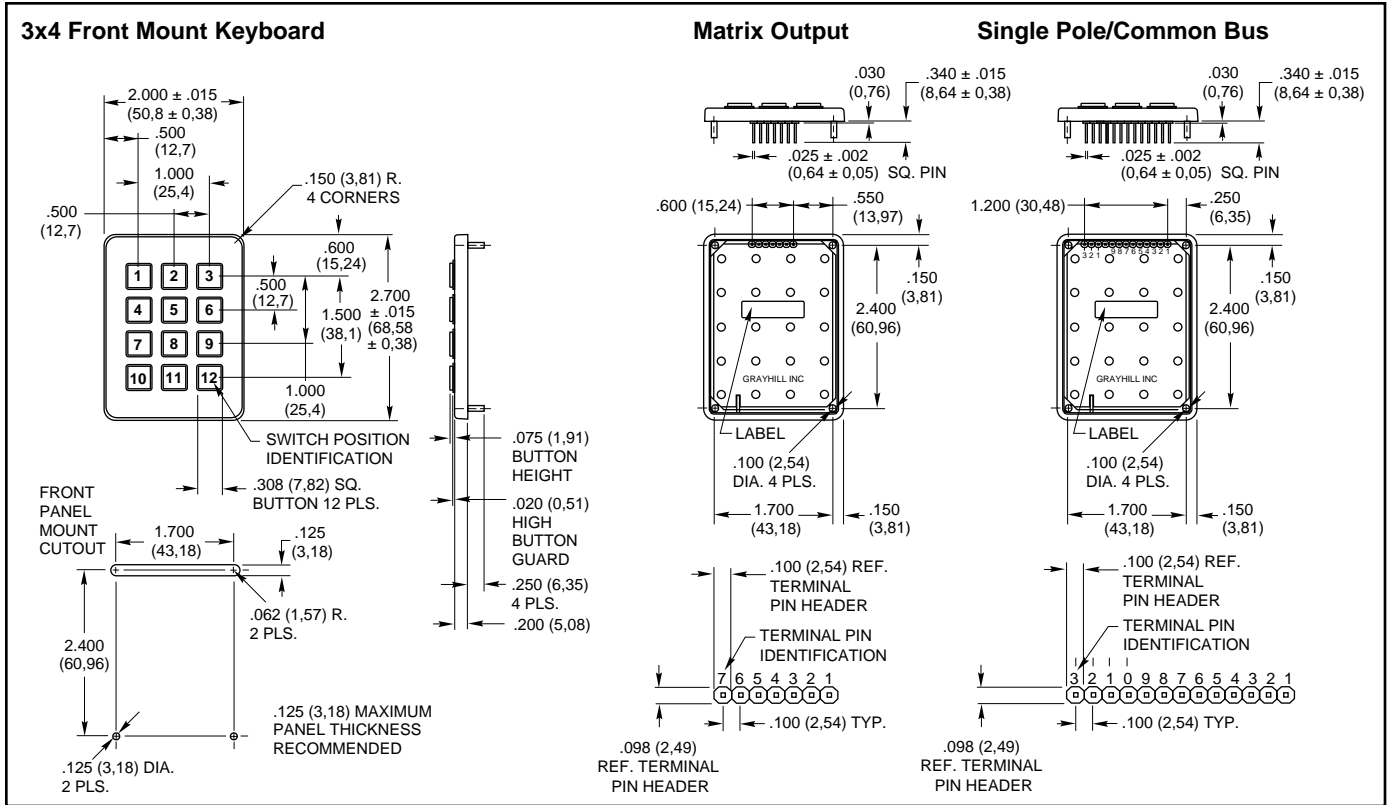
- Quality, Economical Keyboards
- Easily Customized Legends
- Termination Mates With Standard Connectors
- Tactile Feedback to Operator
- 3,000,000 Operations per Button
- Compatible With High Resistance Logic Inputs



The Series 96 is Grayhill's most economical 3x4 and 4x4 keypad family. The contact system utilizes conductive rubber to mate the appropriate PC board traces. Matrix and single pole/common bus circuitry is offered. Built with quality component parts. The Series 96 is subjected to our rigid statistical process control to insure that it meets our reliability standards.

# CONDUCTIVE RUBBER KEYPADS

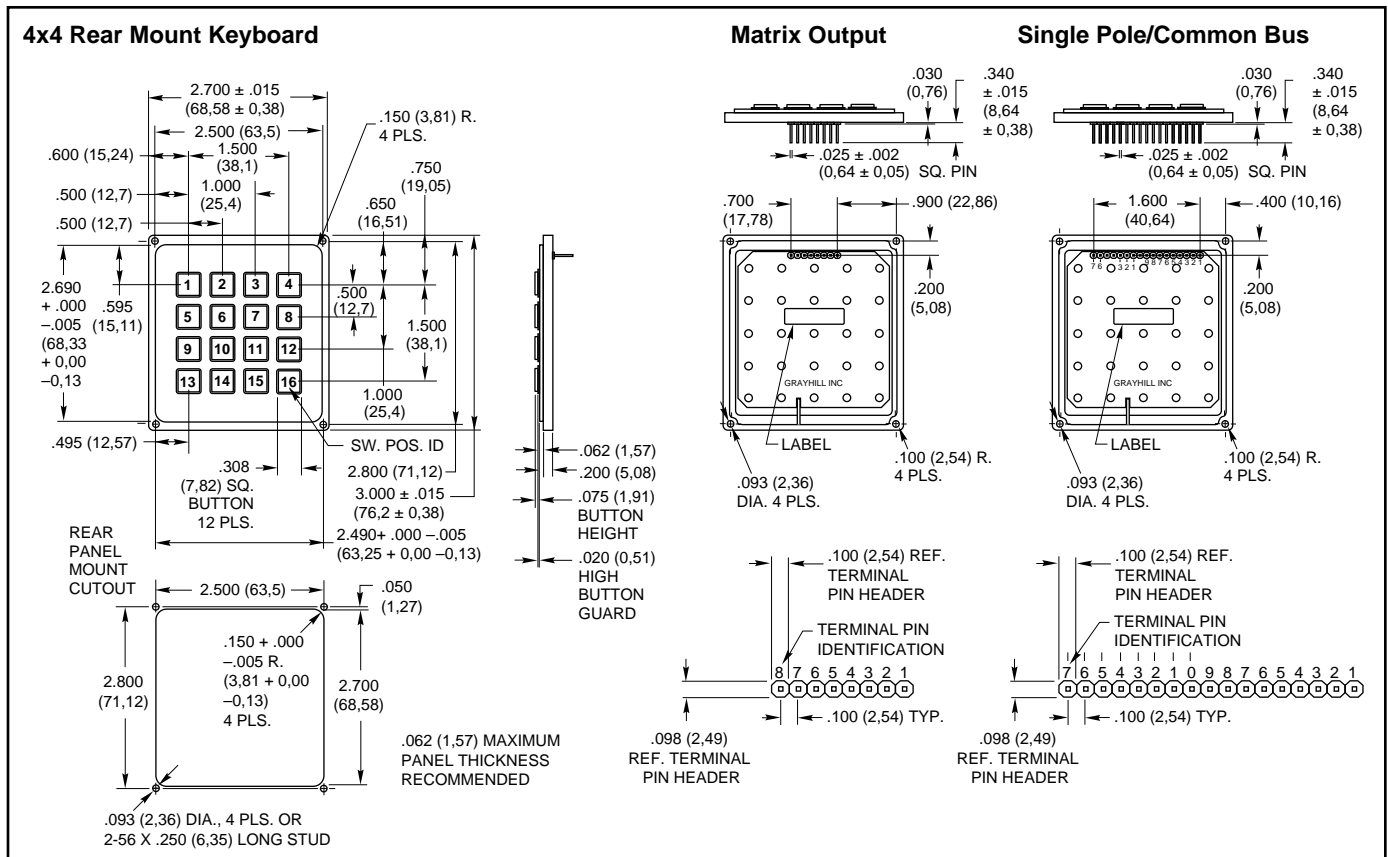
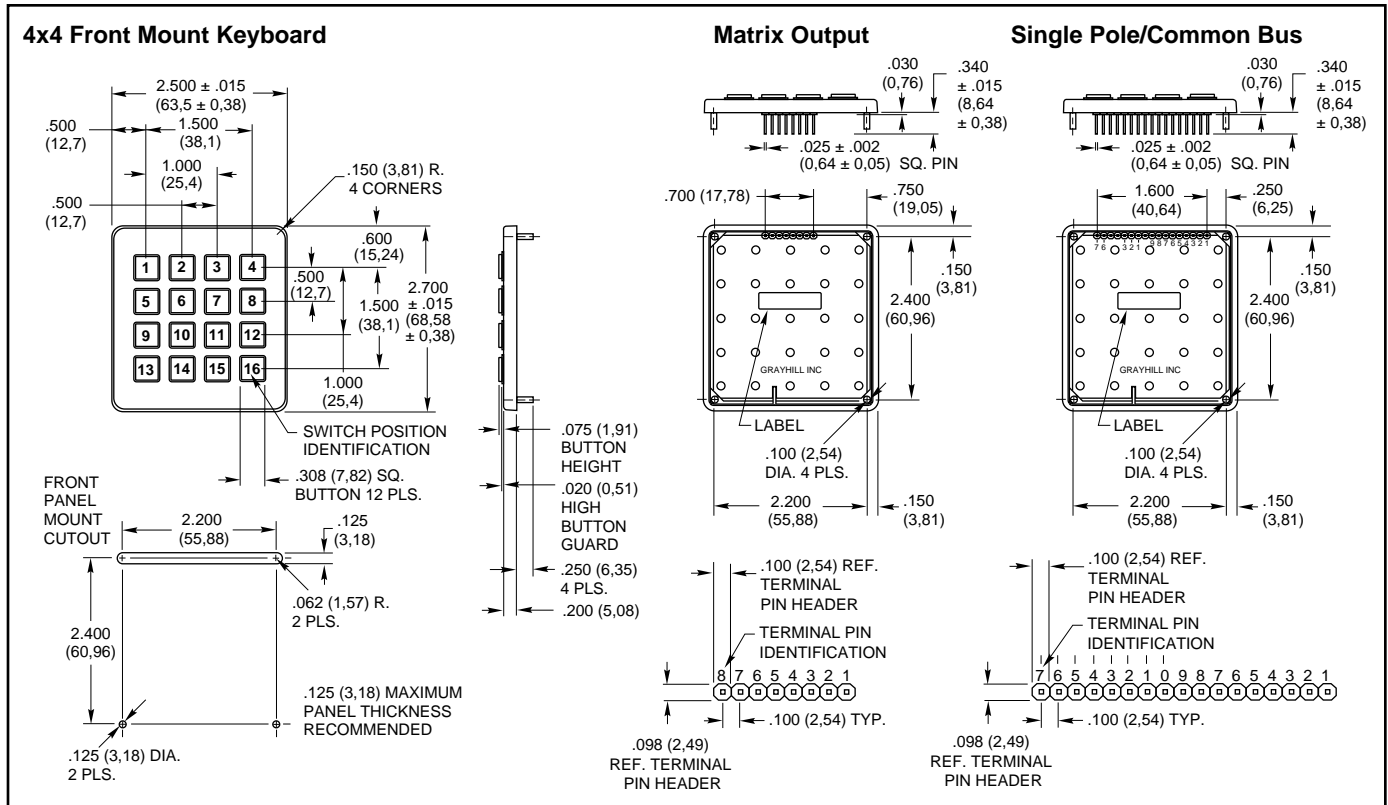
## DIMENSIONS In inches (and millimeters)



See page C-7 for code and truth tables, specifications, standard legends and ordering information.

# CONDUCTIVE RUBBER KEYPADS

## DIMENSIONS In inches (and millimeters)



See page C-7 for code and truth tables, specifications, standard legends and ordering information.

# CONDUCTIVE RUBBER KEYPADS

## CODE AND TRUTH TABLES

Dots in the chart indicate connected terminals when switch is closed.  
Terminals are identified on the keyboard.

### 12 Button Keypads

3x4		CODES																						
		Matrix				Single Pole/Common Bus																		
BUTTON LOCATION	1	•	•	•																				
	2		•	•																				
	3			•	•																			
	4				•	•																		
	5					•																		
	6						•																	
	7							•																
	8								•															
	9									•														
	10										•													
	11											•												
	12												•											
		5	6	7	1	2	3	4	5	9	13	4	8	12	3	7	11	2	6	10	1			
		TERMINAL LOCATION																						

### 16 Button Keypads

4x4		CODES																								
		Matrix				Single Pole/Common Bus																				
BUTTON LOCATION	1	•	•	•																						
	2		•	•																						
	3			•	•																					
	4				•	•																				
	5					•																				
	6						•																			
	7							•																		
	8								•																	
	9									•																
	10										•															
	11											•														
	12												•													
	13													•												
	14														•											
	15															•										
	16																•									
		5	6	7	8	1	2	3	4	4	9	13	17	3	7	12	16	2	6	10	15	1	5	11	14	8
		TERMINAL LOCATION																								

## SPECIFICATIONS

### Rating Criteria

**Rating at 12 Vdc:** 5 milliamps for .5 seconds  
**Contact Bounce:** < 12 milliseconds  
**Contact Resistance:** < 100 ohms (@ stated operating force)  
**Voltage Breakdown:** 250 Vac between components  
**Mechanical Operation Life:** 3,000,000 operations per key  
**Insulation Resistance:** > 10<sup>12</sup> ohms @ 500 Vdc  
**Push Out Force Per Pin:** 5 lbs.

### Operating Features

**Travel:** .040 minimum  
**Operating Force:** 175 ± 40 grams  
**Operating Temperature:** -30°C to +80°C

### Material and Finishes

**Terminal Pin:** Phosphor bronze, solder plated  
**PC Board:** FR-4 glass cloth epoxy  
**Keypad:** Silicone rubber, durometer 50 ± 5  
**Housing:** ABS, cycolac "KJW"  
**Housing Color:** Black

## STANDARD LEGENDS

### 12 Position

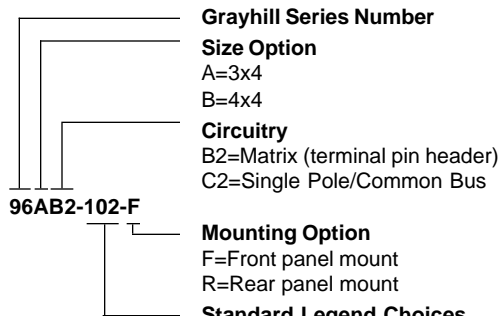
-102 Legend: *Black legends on white button*  
 -152 Legend: *White legends on black button*

### 16 Position

-006 Legend: *Black legends on white button*  
 -056 Legend: *White legends on black button*

See page C-4 for Standard Legend configurations.

## ORDERING INFORMATION



### Grayhill Series Number

### Size Option

A=3x4  
B=4x4

### Circuitry

B2=Matrix (terminal pin header)  
C2=Single Pole/Common Bus

### Mounting Option

F=Front panel mount  
R=Rear panel mount

### Standard Legend Choices

#### 12 Position legends

102=Black legends on a white button  
152=White legends on a black button

#### 16 Position legends

006=Black legends on a white button  
056=White legends on a black button

Available from your local Grayhill Distributor

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