

**SERIES 84B**  
Backlit with Self  
Adhesive Legends

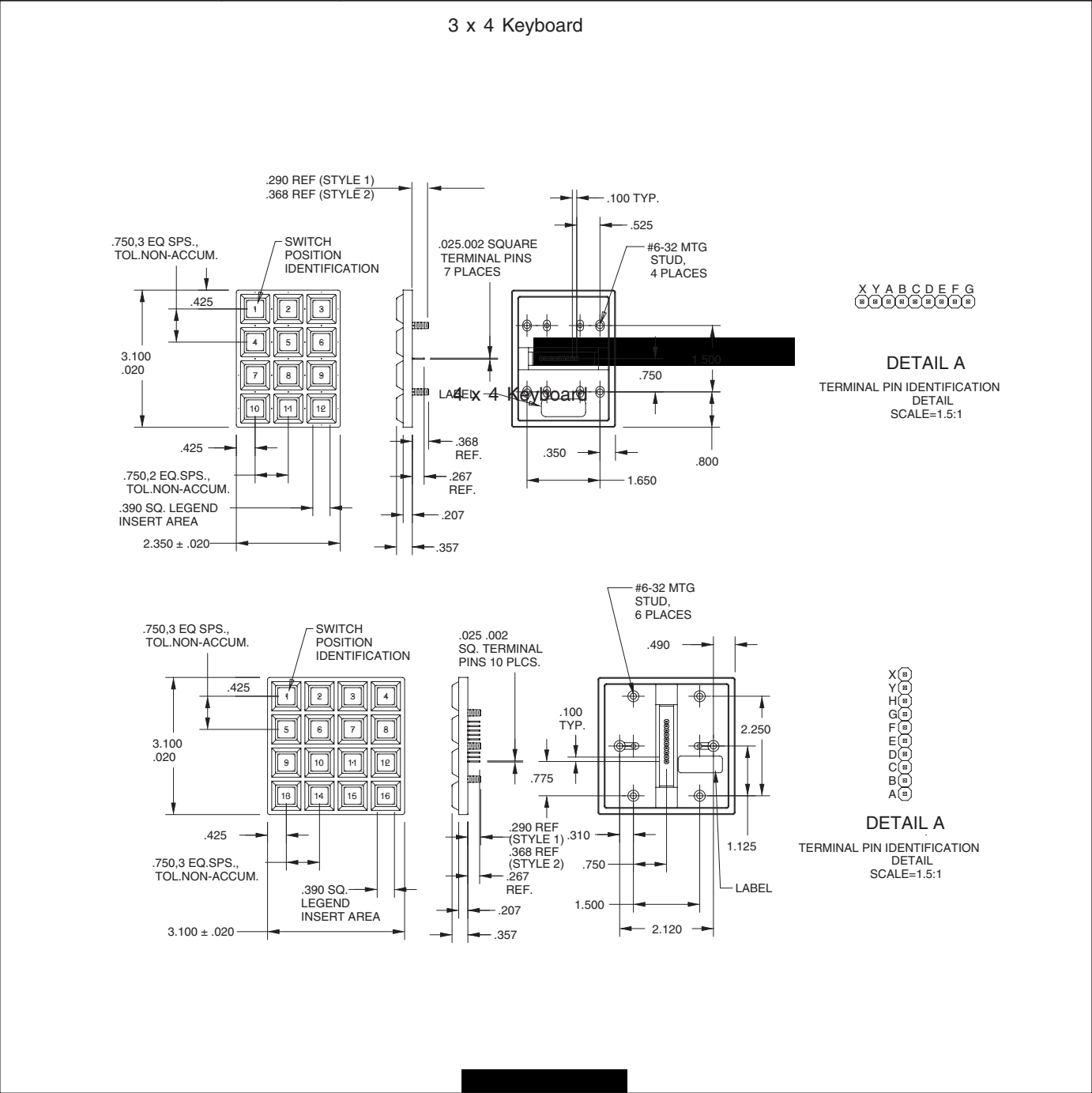
**FEATURES**

- Backlit for Low Light Applications
- Waterproof Silicone Rubber
- Audible, Tactile Contacts
- Low Contact Resistance
- Optional RFI/EMI Shielding
- 3,000,000 Operations per Button



Keyboards and Keypads

**DIMENSIONS** In inches (and millimeters)



**SCHEMATIC AND TRUTH TABLE**

**3 x 4**

**4 x 4**

LED Color	Forward Voltage			Resistor (OHMS)	Typ. Current Consumption (With 5V Pwr. Supply)	
	Min.	Typ.	Max.		3 x 4	4 x 4
Red	-	1.95	2.40	43	155mA	205mA
Yellow/Green	-	1.95	2.40	43	155mA	205mA
Green	1.50	-	2.40	43	155mA	205mA
Orange	-	1.95	2.40	43	155mA	205mA

**SPECIFICATIONS**

**Rating Criteria**

**Rating at 24 Vdc:** - 10 milliamps resistive (max.)

**Contact Bounce:** 4 milliseconds maximum at make; 10 milliseconds, at break

**Contact Resistance:** 10 ohms maximum

**Life Expectancy:** 3 million operations/button

**Insulation Resistance:** >1,000 megohms

**Operating Features**

**Pre-Travel:** .030 inches minimum

**Operating Force:** 20 ± 4 ounces

**Humidity:** 0 to 98% (no condensation)

**Materials and Finishes**

**Terminal Pins:** Copper alloy CDA 725

**PC Board:** FR-4 glass cloth epoxy

**Dome Retainer/Rear Seal Sheet:** Polyester

**Mounting Studs:** Phosphor bronze

**Optional Hex Nut:** Stainless steel, passivated

**Optional EMI Shield:** Aluminum foil

**Keypad:** Silicone rubber

**SELF-ADHESIVE LEGEND SHEETS**

Each 8.5" x 11" legend sheet contains commonly used symbols, terms, alpha characters and 0-9 in helvetica bold type. Self-adhesive legends are clear urethane on a chrome mylar base. Adhesive is silicone/acrylic. Legends can be purchased in the following ways:

1. Entire legend sheets: Part numbers 84AC5012-1, -2, -3 OR -4.
2. Individual legends: Part numbers 84AC5012-0001, -0002 etc. (Individual legend pins are for groups of 10 legends each)
3. See Grayhill drawing 84AC5012-X for detailed information on available legends, sizes and fonts.

**ORDERING INFORMATION**

**84B** = Insertable Legend, Sealed and Shielded  
**84BN** = Insertable Legend, Sealed and Non-Shielded  
**Keyboard Size:** A = 3 x 4, B = 4 x 4  
**B** = Matrix Code

**84BN-AB-022AN**

**N** = Mounting Nuts Supplied and Shipped Loose, Blank = No Nuts Supplied  
**Led Color:** A = Red, B = Yellow, C = Green, D = Orange