

Backlit with Self Adhesive Legends



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



The image contains two technical drawings of keyboards, labeled '3 x 4 Keyboard' and '4 x 4 Keyboard'. Each drawing includes a top view of the keyboard face and a side view of the terminal block.

3 x 4 Keyboard:

- Top View:** Shows a 3x4 grid of switches numbered 1 to 12. Dimensions include .290 REF (STYLE 1), .368 REF (STYLE 2), .750,3 EQ SPS., TOL.NON-ACCUM., .425, 3.100 .020, .425, .750,2 EQ SPS., TOL.NON-ACCUM., .390 SQ. LEGEND INSERT AREA, and 2.350 ± .020.
- Side View:** Shows the terminal block with .025 .002 SQUARE TERMINAL PINS 7 PLACES, #6-32 MTG STUD, 4 PLACES, .100 TYP., .525, .750, 1.500, .350, 1.650, .800, .368 REF., .267 REF., .207, and .357.

4 x 4 Keyboard:

- Top View:** Shows a 4x4 grid of switches numbered 1 to 16. Dimensions include .750,3 EQ SPS., TOL.NON-ACCUM., .425, 3.100 .020, .425, .750,3 EQ SPS., TOL.NON-ACCUM., .390 SQ. LEGEND INSERT AREA, and 3.100 ± .020.
- Side View:** Shows the terminal block with .025 .002 SQ. TERMINAL PINS 10 PLCS., #6-32 MTG STUD, 6 PLACES, .490, .100 TYP., .775, .290 REF (STYLE 1), .368 REF (STYLE 2), .267 REF., .207, .357, .310, .750, 1.500, 2.120, 1.125, and .2250.

Both drawings include a 'DETAIL A' section showing the terminal pin identification. The 3x4 keyboard has 7 pins labeled X through G, and the 4x4 keyboard has 10 pins labeled X through A. The detail scale is 1.5:1.

.020 MAX.
ABOVE SURFACE "A"
OF P.C. BOARD

.200
MAX.

DOME
RETAINER

EMI SHIELD

#6-32
MOUNTING
STUD

STAINLESS STEEL
STYLE "1"

.020 MAX.
ABOVE SURFACE "A"
OF P.C. BOARD

.200
MAX.

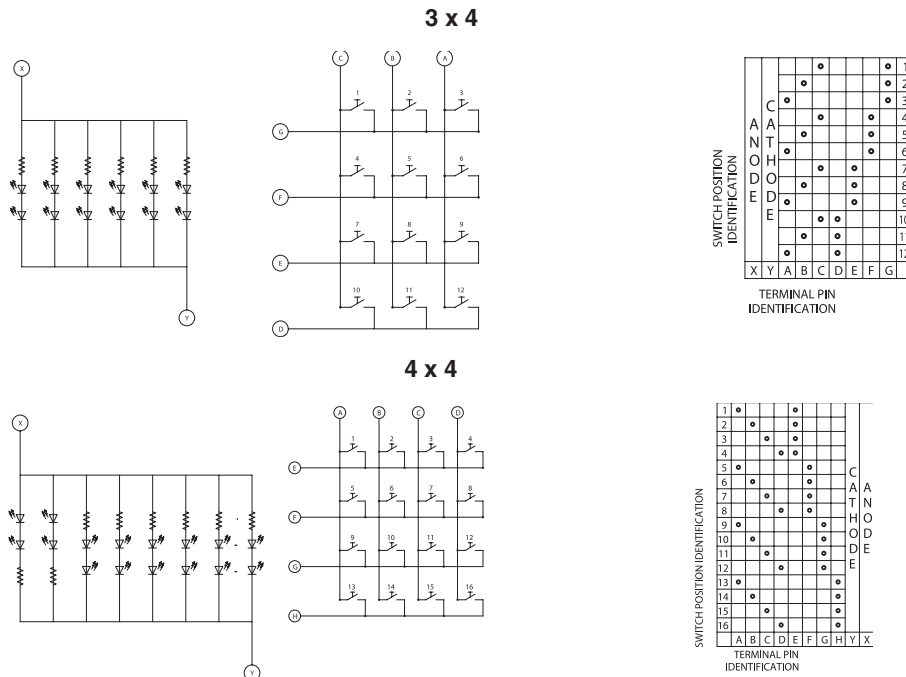
DOME
RETAINER

EMI SHIELD

#6-32
MOUNTING
STUD

PHOSPHOR BRONZE STD.
STYLE "2"

SCHEMATIC AND TRUTH TABLE



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: Style 1: Stainless steel,

Style 2: 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

