

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



3 x 4 Keyboard

Technical drawing of a 3 x 4 Keyboard. The drawing includes front and side views with various dimensions and callouts.

Front View Dimensions:

- Overall width: 2.350 ± .020
- Overall height: 3.100 ± .020
- Switch position identification: .425
- Switch spacing: .750, 3 EQ. SPS., TOL. NON-ACCUM.
- Legend insert area: .390 SQ. LEGEND INSERT AREA
- Terminal pins: .025 .002 SQUARE TERMINAL PINS 7 PLACES
- Terminal pin spacing: .290 REF (STYLE 1), .368 REF (STYLE 2)
- Label area: .207
- Label height: .267 REF.
- Label width: .357

Side View Dimensions:

- Overall width: 1.650
- Overall height: 1.500
- Terminal pin spacing: .100 TYP.
- Terminal pin diameter: .525
- Terminal pin length: .750
- Terminal pin mounting: #6-32 MTG STUD, 4 PLACES
- Terminal pin mounting hole diameter: .350
- Terminal pin mounting hole spacing: .800

Terminal Pin Identification:

Terminal pin identification diagram showing the layout of the terminal pins. The pins are labeled X, Y, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, *, #, ., /, \, ^, _.

DETAIL A
TERMINAL PIN IDENTIFICATION
DETAIL
SCALE=1.5:1

4 x 4 Keyboard

Technical drawing of a 4 x 4 Keyboard. The drawing includes front and side views with various dimensions and callouts.

Front View Dimensions:

- Overall width: 3.100 ± .020
- Overall height: 3.100 ± .020
- Switch position identification: .425
- Switch spacing: .750, 3 EQ. SPS., TOL. NON-ACCUM.
- Legend insert area: .390 SQ. LEGEND INSERT AREA
- Terminal pins: .025 .002 SQ. TERMINAL PINS 10 PLCS.
- Terminal pin spacing: .290 REF (STYLE 1), .368 REF (STYLE 2)
- Label area: .207
- Label height: .267 REF.
- Label width: .357

Side View Dimensions:

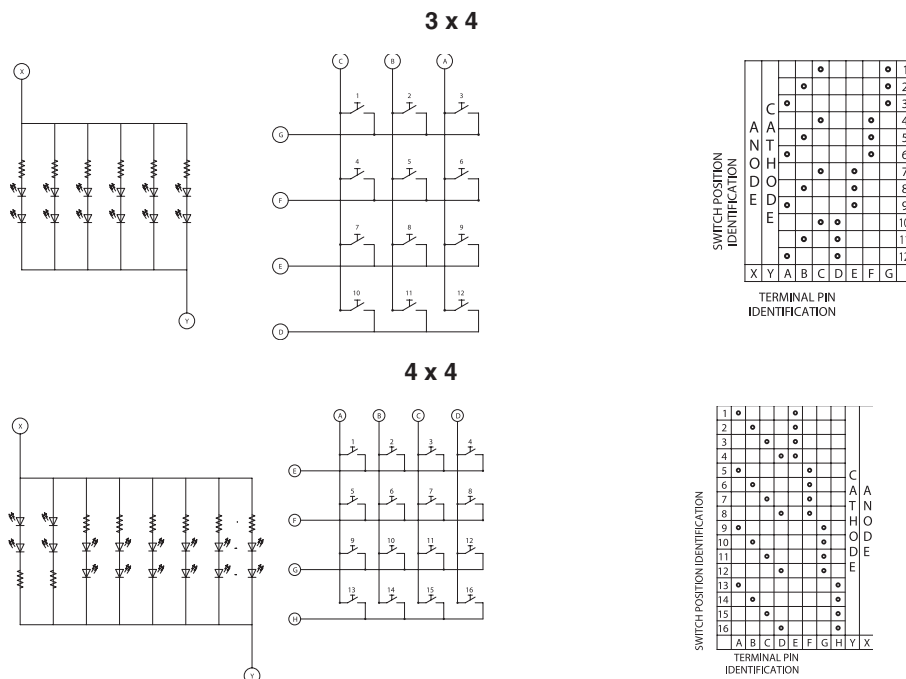
- Overall width: 2.120
- Overall height: 2.250
- Terminal pin spacing: .100 TYP.
- Terminal pin diameter: .490
- Terminal pin length: .775
- Terminal pin mounting: #6-32 MTG STUD, 6 PLACES
- Terminal pin mounting hole diameter: .310
- Terminal pin mounting hole spacing: .750
- Terminal pin mounting hole length: 1.125
- Label area: .207
- Label height: .267 REF.
- Label width: .357

Terminal Pin Identification:

Terminal pin identification diagram showing the layout of the terminal pins. The pins are labeled X, Y, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, *, #, ., /, \, ^, _.

DETAIL A
TERMINAL PIN IDENTIFICATION
DETAIL
SCALE=1.5:1

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: 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

