



- 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 assembly. The drawing includes a top view of the keyboard matrix, a side view showing the profile of the keyboard, and a detail view of the terminal pin identification. Dimensions are provided in inches, with tolerances where applicable. Labels indicate specific components and reference points.

Top View Dimensions:

- Overall width: 2.350 ± .020
- Overall height: 3.100 ± .020
- Switch pitch: .750, 3 EQ SPS., TOL. NON-ACCUM.
- Switch position identification: .425
- Terminal pin pitch: .290 REF (STYLE 1), .368 REF (STYLE 2)
- Terminal pin width: .025 ± .002 SQUARE
- Terminal pin length: .267 REF.
- Terminal pin spacing: .207
- Terminal pin width: .357

Side View Dimensions:

- Overall height: 1.500
- Terminal pin height: .750
- Terminal pin width: .350
- Terminal pin spacing: .1650
- Terminal pin width: .800

Detail A: Terminal Pin Identification

Terminal pin identification detail 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, *, #, ., /, \, ^, _.

4 x 4 Keyboard

Technical drawing of a 4 x 4 keyboard assembly. The drawing includes a top view of the keyboard matrix, a side view showing the profile of the keyboard, and a detail view of the terminal pin identification. Dimensions are provided in inches, with tolerances where applicable. Labels indicate specific components and reference points.

Top View Dimensions:

- Overall width: 3.100 ± .020
- Overall height: 3.100 ± .020
- Switch pitch: .750, 3 EQ SPS., TOL. NON-ACCUM.
- Switch position identification: .425
- Terminal pin pitch: .290 REF (STYLE 1), .368 REF (STYLE 2)
- Terminal pin width: .025 ± .002 SQ. TERMINAL PINS 10 PLCS.
- Terminal pin length: .267 REF.
- Terminal pin spacing: .207
- Terminal pin width: .357

Side View Dimensions:

- Overall height: 2.250
- Terminal pin height: .775
- Terminal pin width: .310
- Terminal pin spacing: .100 TYP.
- Terminal pin width: .2120

Detail A: Terminal Pin Identification

Terminal pin identification detail 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, *, #, ., /, \, ^, _.

Stud Detail

Technical drawing of a stud detail showing two styles, Style 1 and Style 2. The drawing includes a cross-section view of the stud and a side view showing the profile of the stud. Dimensions are provided in inches, with tolerances where applicable. Labels indicate specific components and reference points.

Style 1 Dimensions:

- Overall height: .020 MAX. ABOVE SURFACE "A" OF P.C. BOARD
- Overall width: .200 MAX.
- Terminal pin width: .020 MAX.
- Terminal pin length: .267 REF.
- Terminal pin spacing: .207
- Terminal pin width: .357

Style 2 Dimensions:

- Overall height: .020 MAX. ABOVE SURFACE "A" OF P.C. BOARD
- Overall width: .200 MAX.
- Terminal pin width: .020 MAX.
- Terminal pin length: .267 REF.
- Terminal pin spacing: .207
- Terminal pin width: .357

Labels:

- DOME RETAINER
- EMI SHIELD
- #6-32 MOUNTING STUD

SCHEMATIC AND TRUTH TABLE

3 x 4

4 x 4

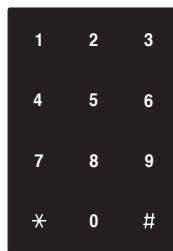
SWITCH POSITION IDENTIFICATION

TERMINAL PIN IDENTIFICATION

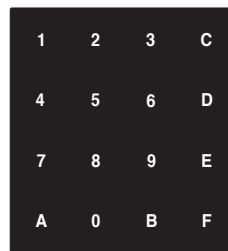
LED Color	Forward Voltage			Resistor (OHMS)	Typ. Current Consumption (With 5V Pwr. Supply)	
	Min.	Typ.	Max.		3 x 4	4 x 4
Red	-	1.95	2.40	43	155mA	205mA
Yellow	-	1.95	2.40	43	155mA	205mA
Green	1.50	-	2.40	43	155mA	205mA
Orange	-	1.95	2.40	43	155mA	205mA

STANDARD LEGENDS

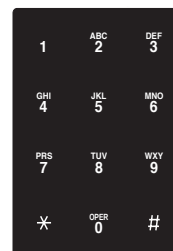
Available through Grayhill Distributors To order one of the configurations below, use the dash number shown here; select the keypad size and order the part number with the appropriate legend dash number. Contact Grayhill for Customs.



-112



-014



-113



-016

SPECIFICATIONS

Rating Criteria

Rating at 24 Vdc: ≤ 10 milliamps resistive
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, solder-plated

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

ORDERING INFORMATION

84BL = Printed Legend, Sealed and Shielded
84BLN = Printed Legend, Sealed and Non-Shielded
Keyboard Size: A = 3 x 4, B = 4 x 4
B = Matrix Code
1 = Style "1" Terminal Pin Header (see stud detail), **2** = Style "2" Terminal Pin Header (see stud detail)

84BLN-AB1-XXXAN

N = Mounting Nuts Supplied and Shipped Loose, Blank = No Nuts Supplied
Led Color: A = Red, B = Yellow, C = Green, D = Orange
Standard Legends: -112 or -113 for 3x4, -014 or -016 for 4x4



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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