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EIA-498AAAA

EIA SPECIFICATION

Detail Specification for Short Stroke Keypads

EIA-498AAAA

AUGUST 1992

ELECTRONIC INDUSTRIES ASSOCIATION
ENGINEERING DEPARTMENT



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(From Standards Proposal No. 2252 formulated under the cognizance of P-13.3 Subcommittee on Sensitive, Pushbutton and Keyboard Switches)

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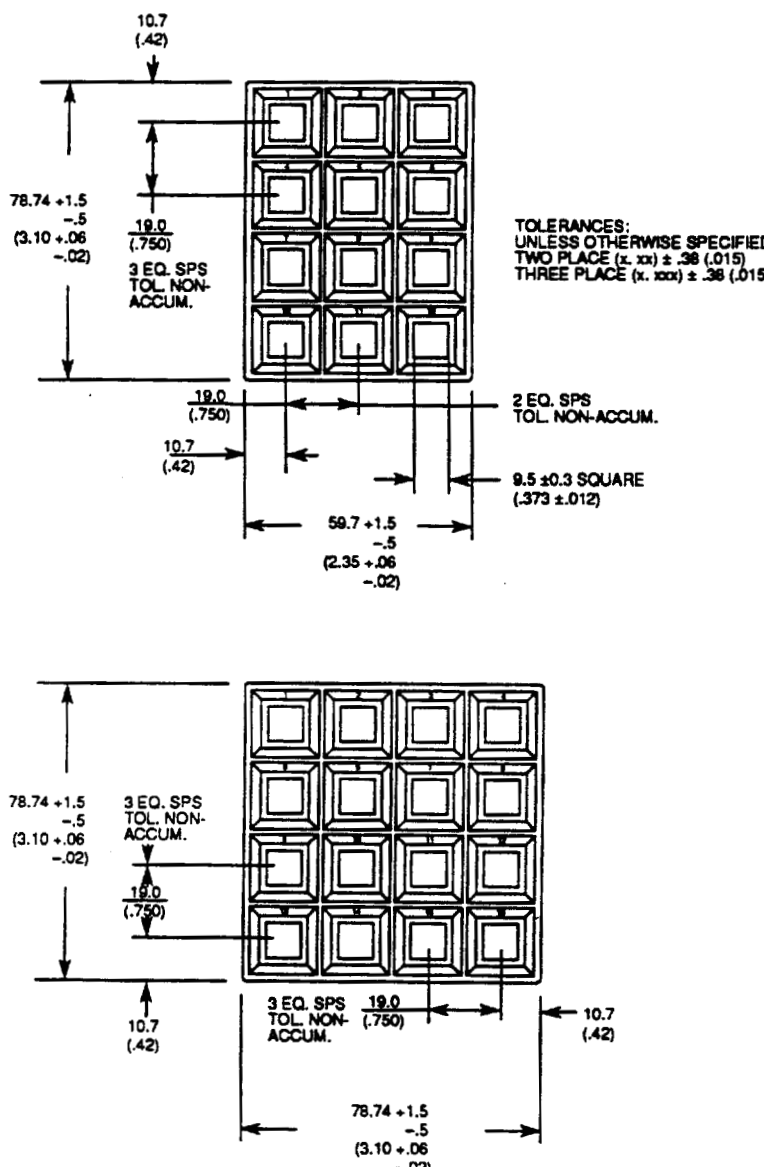
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National standards Organization Electronic Industries Association 2001 Pennsylvania Ave. N.W. Washington, D.C. 20006	Detail Specification Number EIA-498AAAA
Generic Specification Number Keyboard switches of certified quality EIA-4980000	Blank Detail Specification EIA-498AA00
Outline Drawing  10.7 (.42) 78.74 +1.5 - .5 (3.10 +.06 -.02) 19.0 (.750) 3 EQ. SPS TOL. NON- ACCUM. TOLERANCES: UNLESS OTHERWISE SPECIFIED TWO PLACE (x.xx) ± .36 (.015) THREE PLACE (x.xxx) ± .36 (.015) 18.0 (.750) 10.7 (.42) 2 EQ. SPS TOL. NON-ACCUM. 9.5 ± 0.3 SQUARE (.373 ± .012) 59.7 +1.5 - .5 (2.35 +.06 -.02) 78.74 +1.5 - .5 (3.10 +.06 -.02) 10.7 (.42) 19.0 (.750) 3 EQ. SPS TOL. NON- ACCUM. 10.7 (.42) 78.74 +1.5 - .5 (3.10 +.06 -.02)	Product Description - short stroke keypad - .750 button spacing - 12 or 16 buttons (keys) - watertight panel seal - optional internal EMI/RFI shield Electrical Circuit SPST per station (key) with various interconnection of stations
	Typical Construction printed circuit board base silicone rubber over keypad insertable legends
	Application

Information on the availability of components qualified to this specification is given in the Qualified Products List

DETAIL SPECIFICATION FOR SHORT STROKE KEYPADS

The complete requirements for the switches described herein shall consist of this detail specification, the latest issue of EIA-498A000 "SECTIONAL SPECIFICATION FOR SHORT STROKE SWITCH PANELS" and the latest issue of EIA-4980000 "GENERIC SPECIFICATION FOR KEYBOARD SWITCHES OF CERTIFIED QUALITY."

1.0 SECTION ONE - SCOPE AND OBJECT**1.1 SCOPE**

The short stroke keypads of certified quality covered by this detail specification:

- 1) have maximum enclosure dimensions of 3.16 by 3.16 by .53 (excludes terminals and mounting studs)
- 2) have a maximum rated voltage of 24 V dc
- 3) have a maximum rated current of 20 mA.

1.2 OBJECT

The object of this detail specification is to provide all information required for the identification, quality assessment and certification of these keyboards. The information contained herein or by reference is complete and sufficient for inspection purposes.

2.0 SECTION TWO - GENERAL**2.1 PART NUMBER**

Each keypad shall be classified and identified (marked) as follows:

- A) The number of this specification EIA-498AAAA.
- B) Discrete switch identification per Table II.

EXAMPLE: EIA498AA01G10 identifies a keypad with 16 buttons, 0.450 mounting stud length, shield, solder terminals and key legends as shown in Figures 3 through 10.

2.2 MARKING

The marking of the switch and package shall be in accordance with the requirements of 2.5 of EIA-4980000.

2.3 ORDERING INFORMATION

Orders for switches covered by this specification shall contain the following information as a minimum:

- a) The applicable part number per 2.1 above.
- b) The number and issue of this detail specification.
- c) When certified records of released lots are required, include "CERTIFIED RECORDS REQUIRED."

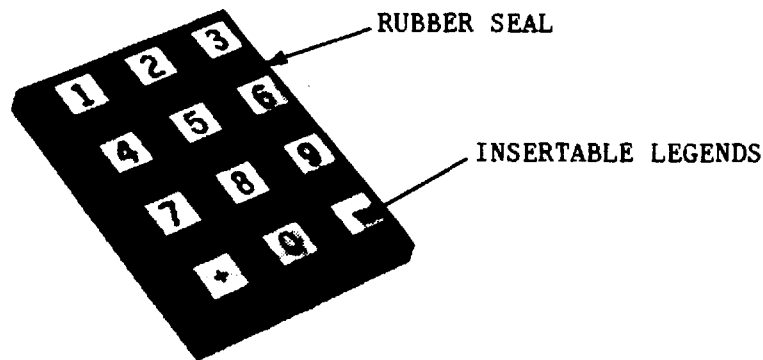
2.4 CERTIFIED RECORDS OF RELEASED LOTS

When certified records of released lots are specified on the purchase order by the buyer, the supplier shall provide the attribute data (i.e. number of components tested and number of defective components) for each lot-by-lot acceptance test performed on the switches shipped to the buyer. When specified, the supplier shall also provide the complete test report for the last complete periodic inspection. If no periodic inspection has been performed, the supplier shall provide the original qualification test report.

2.5 SAFETY CONSIDERATIONS

The user shall consider the suitability of the switch with regard to any safety requirements applicable to the equipment.

2.6 COMMON FEATURES



2.6.1 TERMINALS

- 2.6.1.1 WIRE WRAP TERMINALS - shall be 0.025 square phosphor bronze with 30 microinch minimum nickel plate per QQ-N-290 under 30 microinch minimum gold plate per MIL-G-45204, Type I or II.
- 2.6.1.2 SOLDER PLATE TERMINALS - shall be 0.025 square phosphor bronze or beryllium copper with 50 microinch nickel plate under 100 microinch minimum tin-lead containing 50-95% tin per MIL-P-81728.
- 2.6.1.3 TURRET TERMINALS - 0.050 diameter double turret brass, CA360, $\frac{1}{2}$ hard with 300 - 500 microinch thick electrosolder over 200 - 400 microinch thick copper plate.

2.6.2 ALTITUDE RELIEF HOLES

Switches shall have altitude relief hole(s) between the rear (bottom) of the switch and the volume under the silicone rubber boot.

2.6.3 COLORS

Colors shall be in accordance with the following FED-STD-595 code numbers:

black = 27038 white = 27875 orange = 22246 red = 21105



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