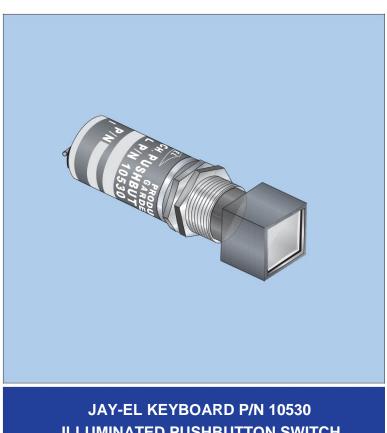
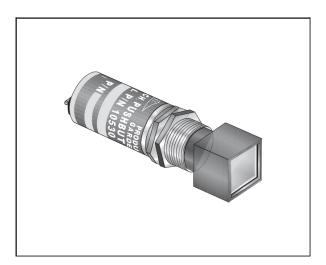
# Jay-El Keyboard P/N 10530



JAY-EL KEYBOARD P/N 10530
ILLUMINATED PUSHBUTTON SWITCH
MIL-S-22885/79 ON THE
QUALIFIED PRODUCTS LIST

#### MIL-S-22885/79 on the Qualified Products List



# **ENGINEERING SPECIFICATIONS**

# **ELECTRICAL**

Switch Contacts: Silver alloy contacts are a standard. Gold contacts are recommended for reliable low level switching below 1.0 amperes.

Switch Ratings:

## **SILVER CONTACTS** Maximum 2/

Load	Sea	50,000 FT	
	28VDC	115VAC, 60Hz	28VDC
Resistive Inductive Lamp 1/	7.0 Amps 4.0 Amps 2.5 Amps	7 Amps 7 Amps 2 Amps	4.0 Amps 2.5 Amps 2.5 Amps

1/Inrush, 10:1 for 20 milliseconds maximum.

2/ Minimum conditions are dependent on use and atmospheric conditions. Contact Jav-El for Detailed applications information.

# **GOLD CONTACTS**

Gold Contacts: Sea level to 50,000 feet, 28V, 1Amp. Res., .5 Amp Ind.

Contact Resistance: 25 milliohms maximum in accordance with MIL-S-22885 for switch contacts and 1 Ohm maximum in accordance with MIL-S-22885 for lamp contacts.

Electrical Life: Para. 3.6.24 of MIL-S-22885

Lamp Type: T1 3/4 midget flange base incandescent is standard.

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# **DESIGN FEATURES**

The Keyboard Switch is an illuminated pushbutton switch designed and qualified for military, airborne and commercial computer applications. Dry circuit or power switch available.

Solder or Printed Circuit Board terminations in single or two pole double throw switching.

Lighting and display techniques are available to meet military and commercial requirements.

Seven different pushbutton sizes Sealed or Unsealed.

#### **LEGEND REQUIREMENTS**

Many combinations of character of background illumination may be accomplished, including sunlight readable Display Type 8. NVIS Compatible lighting contact factory.

### **MECHANICAL**

Light Weight : 18.3 grams maximum Actuation Force : 22 + 4 oz.; unsealed

 $\frac{1}{2}$  8 oz.; sealed

Pre-travel : .125± .060 Over-travel : .015 minimum

Switch Action : 1 and 2 pole momentary

Mounting Torque: 5 + .5 inch lbs. Mechanical Life 100,000 cycles

Pushbutton Extraction Force: 2 to 8 lbs.

# **ENVIRONMENTAL**

Temperature high: +85

Humidity: Per MIL-STD-202, Metrhod 106

Explosion: Per Per MIL-STD-810, Method 511,

Procedure 11

Shock: 75 G's, 6 milliseconds, Half Sine and

MIL-S-901C

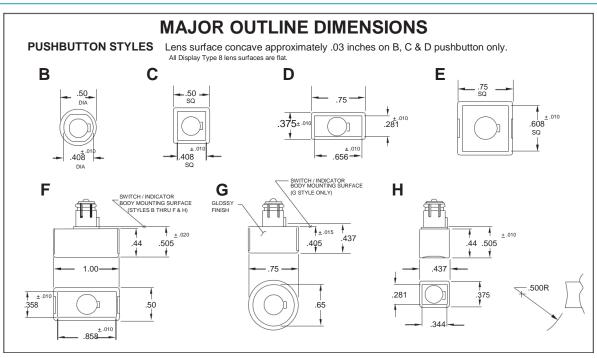
EMI: Per Per MIL-STD-285

Vibration: 10 to 500 @ 0.06DA or 10g (peak)

which ever is less.

Basic switch contacts per MIL-S-8805

ALL INFORMATION PUBLISHED IN THIS CATALOG IS EFFECTIVE AT TIME OF PUBLICATION AND IS SUBJECT TO CHANGE WITHOUT NOTICE.



ORDERING PROCEDURE - Fill out Preliminary Product Specification using Tables below and submit to Jay-El for Customer Code assignment.

TABLE 1 BASIC P/N	TABLE 2 MOUNTING TYPE	TABLE 3 BEZEL COLOR	TABLE 4 SPLIT GROUND	TABLE 5		TABLE 6 DRIP PROOF SEAL	TABLE 7 RETAINED PUSHBUTTON	TABLE 8 PUSHBUTTON STYLE	TABLE 9 SWITCH POLES		TABLE 10 CONTACTS	
10530	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	YES NO		YES NO	NOT APPLICABLE	B C D E F G H	0 INDICATOR 1 1 SPDT 2 2 SPDT	(ABOVE 1 AMP S SILVER CONTACTS	G GOLD	
TABLE 11 SWITCH ACTION	TABLE 12 UNLIGHTED BACKGROUN	TABLE D   DISPLAY I		TABI LIGH COL	ITED			TABL DISPLA			TABLE 16 CHARACTER SIZE AND PLACEMENT	
O INDICATOR M MOMENTARY	BLK BLACK DW DIFFUSE WHITE NG NUETRA R RED A AMBER Y YELLOW G GREEN B BLUE	FORM		CLEAR RED AMBER YELLOW BLUE DIFFUSED WHITE BLUE 1	MI NG AY AG1	LIGHT NUETRAL GRAY GREEN AVIATION YELLOW	1. BLACK CHAR BACKGROUN 2. REPLACED B NEUTRAL GR. 4. ILLUMINATIN CHARACTERS CONDITION.	SEE CHARACTER INFORMATION CHART  TABLE 17 LAMPS				
NOTES  *AGE AND ADDRESS PROPRIED WISH GREEN OR YELLOW IS TO MEET MIL - C - 25050 AY APPEARS AMBER WHEN ILLUMINATED.  *B1 AND AG1 SPECIAL HIGH BRIGHT BLUE & GREEN RECOMMENDED FOR DISPLAY TYPE 8.  ** DISPLAY TYPE 8 IS AVAILABLE IN .012 STROKE WIDTH ONLY.						5. CONTRASTIN COLORED BA OR AMBER BY OTHER COLO 6. DISPLAY TYPES NOT C SPECIFIED BY SPECIFIED BY 7. WHITE CHAR. BACKGROUN 8. SUNLIGHT RE BEFORE LIGH VISIBLE IN DII	128 5V 130 12V 187 28V					

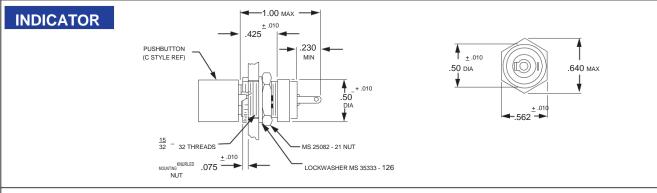
#### CHARACTER INFORMATION (HORIZONTAL DIRECTION ONLY)

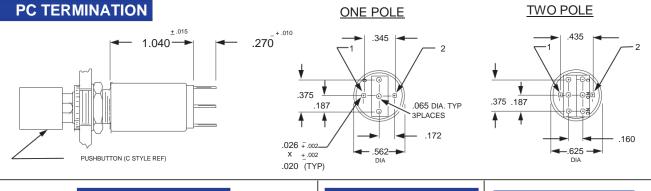
IF ADDITIONAL CHARACTERS PER LINE ARE REQUIRED SPECIFY FUTURA MEDIUM CONDENSED.

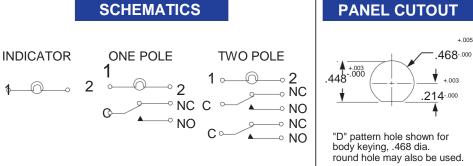
SPECIFI FUTURA MEDIDIM CONDENSED.										
FUTURĄ MEDIUM CONDESED	SIZĘ	STROKE	HEIGHT	CHARACTERS PER LINE						
				В	С	D	Е	F	G	Н
JAY - EL PRODUCTS INC.	-1	.012	.072	6	6	8	8	8	8	5
JAY - EL PRODUCTS INC.	-2	.012	.087	5	5	7	7	7	7	4
JAY - EL PRODUCTS INC.	-3	.012	.109	4	4	5	5	5	5	3
JAY - EL PRODUCTS	-4	.012	.125	3	3	4	4	4	4	3
JAY - EL PRODUCTS	-5	.012	.145	3	3	4	4	4	4	2
JAY - EL PRODU	-6	.012	.175	2	2	3	3	3	3	2
JAY - EL PRO	-7	.012	.222	2	2	2	2	2	2	2

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#### **MAJOR OUTLINE DIMENSIONS** .425 TWO POLE <u>+</u> .010 .075 32 THREADS MOUNTING 0 € 0 0 .562 DIA.562 DIA .640 мах .625 DIA .640 MAX ℀ PUSHBUTTON (C STYLE REF) .562 **-←**.562 **→** MS 25082 - 21 NUT LOCKWASHER MS 35333 - 126 .540 -1.00 MAX ---> **INDICATOR** <u>+</u> .010









Tolerances: Unless otherwise specified - Fraction ± 1/32", .XX±.01, XXX ± .005

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