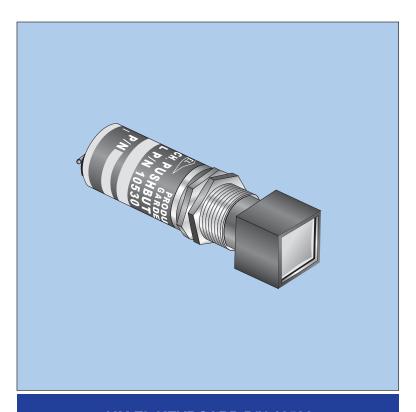


# Jay-El Keyboard P/N 10530

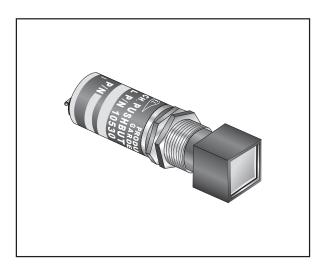


JAY-EL KEYBOARD P/N 10530
ILLUMINATED PUSHBUTTON SWITCH
MIL-S-22885/79 ON THE
QUALIFIED PRODUCTS LIST

Catalog No. 1004 J 11-03



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 Jay-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.

#### Page 2

#### **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 Un-sealed.

#### **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

24 ± 8 oz.; sealed

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

Switch Action : 1 and 2 pole momentary

Mounting Torque :  $5 \pm .5$  inch lbs. Mechanical Life 100,000 cycles

Pushbutton Extraction Force : 2 to 8 lbs.

# **ENVIRONMENTAL**

Temperature high: +85°C Low: -55°C

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

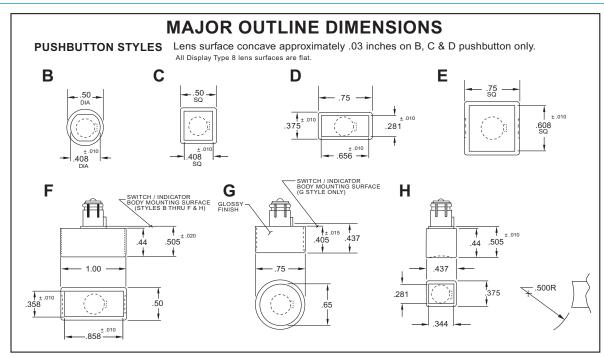
Vibration: 10 to 500 @ 0.06DA or 10g (peak)

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-EI for Customer Code assignment.

TABLE 1 BASIC P/N	TABLE 2 MOUNTING TYPE	TABLE 3 BEZEL COLOR	TABLE 4 SPLIT GROUND	TABLE 5 EMI	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	(BELOW 1 AMP) G GOLD CONTACTS

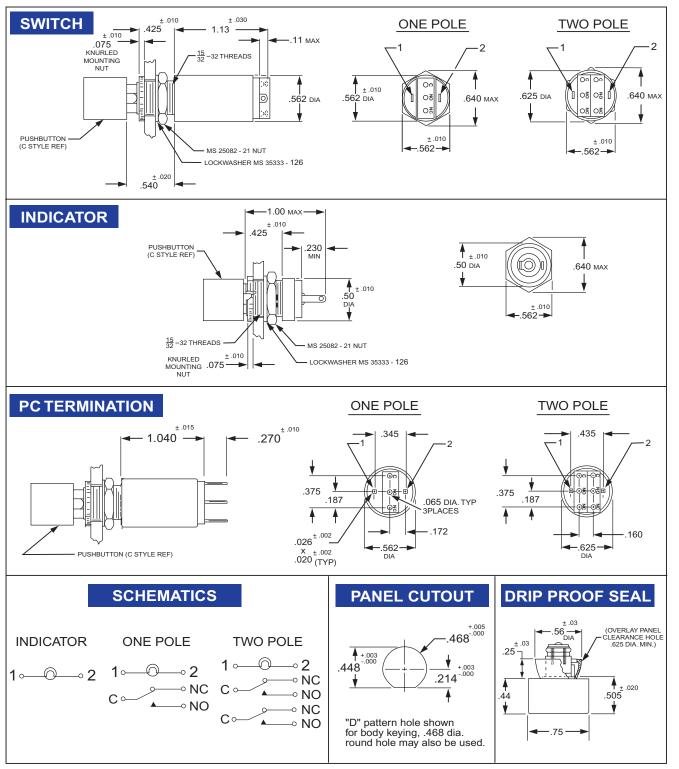
TABLE 11 SWITCH ACTION	TABLE 12 UNLIGHTED BACKGROUND COLOR	TABLE 13 DISPLAY DATA	TABLE 14 * LIGHTED COLOR		TABLE 15 * * DISPLAY TYPE	TABLE 16 CHARACTER SIZE AND PLACEMENT	
O INDICATOR M MOMENTARY	BLK BLACK DW DIFFUSED WHITE NG NUETRAL GRAY R RED A AMBER Y YELLOW G GREEN B BLUE	TO BE SPECIFIED ON PRELIMINARY FORM	C CLEAR R RED A AMBER Y YELLOW G GREEN B BLUE DW DIFFUSED WHITE B1 BLUE 1	WL WHITE LIGHT NG NUETRAL GRAY AVIATION GREEN AY AVIATION YELLOW AG1 AVIATION GREEN1	BLACK CHARATERS ON DIFFUSED WHITE BACKGROUND.     BACKGROUND ILLUMINATES IN COLOR.     REPLACED BY DISPLY TYPE 7.     UNREADABLE BEFORE LIGHTED. OPAQUE CHARACTERS ON NEUTRAL GRAY ILLUMINATING BACKGROUND.     ILLUMINATING CHARACTERS ON BLACK BACKGROUND.     CHARACTERS SHALL NOT APPEAR ILLUMINATED IN UNLIT CONDITION.     CONTRASTING OPAQUIE CHARACTERS ON ILLUMINATING.	SEE CHARACTER INFORMATION CHART  TABLE 17 LAMPS  T1 3/4 NUMBER	
* B1 AND A RECOMMI	RS AMBER WHE G1 SPECIAL HIGI ENDED FOR DISP	MEET MIL - C - 25 N ILLUMINATED. H BRIGHT BLUE &	GREEN	OCLORED BACKGROUND, BLACK CHARACTERS ON YELLOW OR AMBER BACKGROUND, WHITE CHARACTERS ON YELLOW OR AMBER BACKGROUND, WHITE CHARACTERS ON ALL OTHER COLORS.  6. DISPLAY TYPES NOT COVERED BY THIS TABLE SHOULD BE SPECIFIED BY A NOTE ON PURCHASE ORDER OR MAY BE SPECIFIED ON JAVEL CUSTOMER SPECIFICATION. 7. WHITE CHARACTERS ILLUMINATINE IN COLOR ON BLACK BACKGROUND.  8. SUNLIGHT READBLE ILLUMINATING CHARACTERS ARE HIDDEN BEFORE LIGHTED. BLACK BACKGROUND, CHARACTERS ARE VISIBLE IN DIRECT SUNLIGHT. 910,000FC) WHEN LIGHTED.	328 5V 330 12V 387 28V		

# CHARACTER INFORMATION (HORIZONTAL DIRECTION ONLY) IF ADDITIONAL CHARACTERS PER LINE ARE REQUIRED SPECIFY FUTURA MEDIUM CONDENSED.

FUTURA MEDIUM CONDESED	SIZE	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



## MAJOR OUTLINE DIMENSIONS



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