

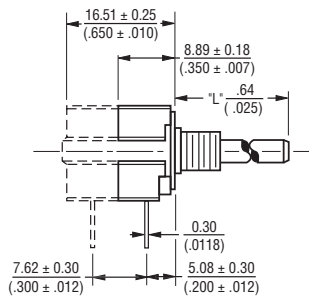


# 51/53 - Sealed 1/2" (12.5 mm) Square Control

**BOURNS®**

## Product Dimensions

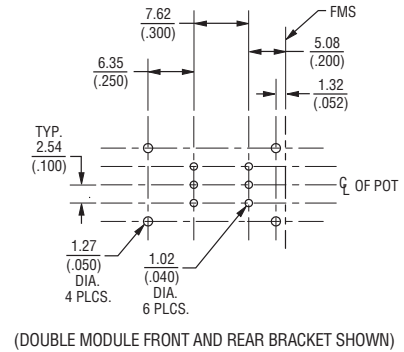
### PACKAGE DIMENSIONS



(SINGLE AND DUAL MODULE SHOWN)

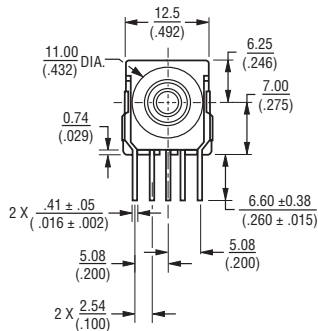
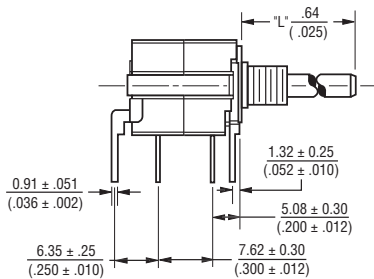


TERMINAL SPACING

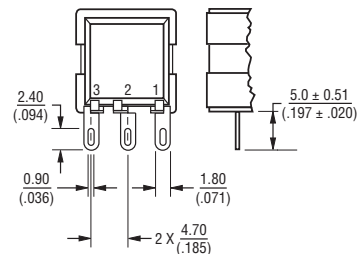


(DOUBLE MODULE FRONT AND REAR BRACKET SHOWN)

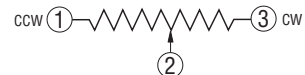
### PACKAGE DIMENSIONS PCB MOUNTING BRACKET



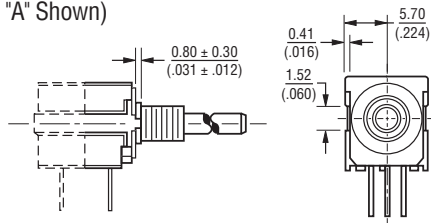
### SOLDER LUG TERMINALS MODEL 53



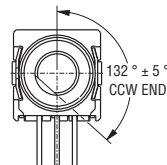
### ELECTRICAL SCHEMATIC



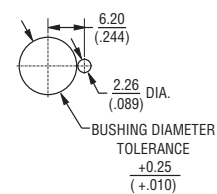
### ANTI-ROTATION LUG (Style "A" Shown)



### SHAFT FLAT ORIENTATION



### SUGGESTED PANEL LAYOUT



FOR TOLERANCES SHOWN: .XX = ± .25 (.010)  
 .XXX = ± .13 (.005)  
 SHAFT DIMENSIONS ± .80 (1/32)

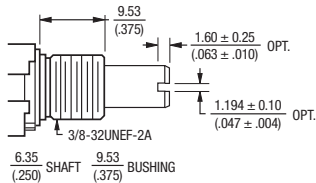
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

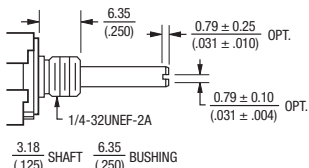
# 51/53 - Sealed 1/2" (12.5 mm) Square Control

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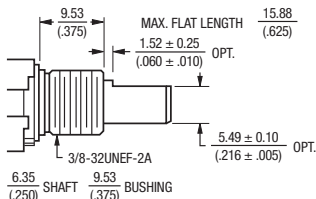
## Shaft/Bushing Styles



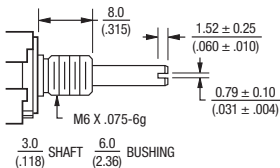
A Style Bushing	
STD. LENGTH 'L'	
.500	(12.7)
.625	(15.88)
.750	(19.05)
.875	(22.23)
1.000	(25.4)



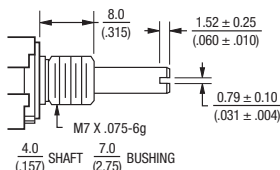
C Style Bushing	
STD. LENGTH 'L'	
.375	(9.53)
.500	(12.7)
.625	(15.88)
.750	(19.05)
.875	(22.23)
1.000	(25.4)



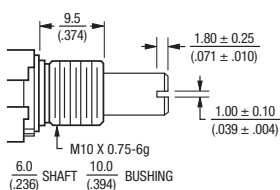
A Style Bushing - Flatted Shaft	
STD. LENGTH 'L'	
.625	(15.88)
.750	(19.05)
.875	(22.23)
1.000	(25.4)



S Style Bushing	
STD. LENGTH 'L'	
.630	(16.0)
.866	(22.0)
.984	(25.0)



U Style Bushing	
STD. LENGTH 'L'	
.630	(16.0)
.866	(22.0)
.984	(25.0)



R Style Bushing	
STD. LENGTH 'L'	
.630	(16.0)
.866	(22.0)
.984	(25.0)

DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## How To Order

51 A A D - B 28 - A 15 / A15 L

Part number for multiple section potentiometers must have a taper and resistance value for each section.

RoHS IDENTIFIER  
L Compliant

MOUNTING BRACKET/ ANTI-ROTATION LUG	
Code	Description
A	AR Lug 90° CW
D	No AR Lug or Bracket
L	Front Bracket
M	Rear Bracket
N	Front and Rear Bracket

# SECTIONS/DETENTS	
Code	Description
A	Single No Detent
B	Double No Detent
E	Single w/Center Detent
F	Double w/Center Detent

BUSHING CONFIGURATION	
Code	Description
A	3/8" D x 3/8" L
C	1/4" D x 1/4" L
R	10 mm D x 9.5 mm L
S	6 mm D x 8 mm L
U	7 mm D x 8 mm L

MODEL	
Code	Description
51	PC Pins (.100" centers)
53	Solder Lugs

ELEMENT TAPER TYPE/TOLERANCE		RESISTANCE (CODE)	
Code	Description	VALUE IN OHMS	
(A)	Linear Cermet ±10 %	(28) - 150	(14) - 7.5 K
(H)	Linear Cermet ±5 %	(06) - 200	(15) - 10 K
		(07) - 250	(30) - 15 K
		(08) - 500	(16) - 20 K
		(09) - 750	(17) - 25 K
		(10) - 1 K	(18) - 50 K
		(29) - 1.5 K	(19) - 75 K
		(11) - 2 K	(20) - 100 K
		(12) - 2.5 K	(21) - 500 K
		(13) - 5 K	(25) - 1 M
(B)	Linear C-P ±20 %	(10) - 1 K	(18) - 50 K
(E)	Linear C-P ±10 %	(12) - 2.5 K	(20) - 100 K
		(13) - 5 K	(22) - 250 K
		(15) - 10 K	(23) - 500 K
		(16) - 20 K	(25) - 1 M
		(17) - 25 K	
(C)	CW Audio Cermet ±10 %	(10) - 1 K	(18) - 50 K
(F)	CCW Audio Cermet ±10 %	(12) - 2.5 K	(20) - 100 K
		(13) - 5 K	(23) - 500 K
		(15) - 10 K	(25) - 1 M
		(17) - 25 K	
(D)	CW Audio C-P ±20 %	(10) - 1 K	(18) - 50 K
(S)	CW Audio C-P ±10 %	(12) - 2.5 K	(20) - 100 K
		(13) - 5 K	(22) - 250 K
		(15) - 10 K	(23) - 500 K
		(17) - 25 K	(25) - 1 M
(G)	CCW Audio C-P ±20 %	(10) - 1 K	(18) - 50 K
(T)	CCW Audio C-P ±10 %	(12) - 2.5 K	(20) - 100 K
		(13) - 5 K	(22) - 250 K
		(15) - 10 K	(23) - 500 K
		(17) - 25 K	(25) - 1 M
(Y)	CW Dual Audio Taper C-P ±20 %	(10) - 1 K	(18) - 50 K
		(12) - 2.5 K	(20) - 100 K
		(13) - 5 K	(22) - 250 K
		(15) - 10 K	(23) - 500 K
		(17) - 25 K	(25) - 1 M

Code	SHAFT TYPE Description	AVAILABLE ONLY IN	
		BUSHINGS Code	LENGTHS Description
B	Single Slotted 1/4" D	A	24,28
C	Single Flatted 1/4" D	A	20,24,28,32
E	Single Slotted 1/8" D	C	12,16,20,24,28
R	Single Slotted 6 mm D	R	16,22,25
T	Single Slotted 4 mm D	U	16,22,25
U	Single Slotted 3 mm D	S	16,22,25

Code	SHAFT LENGTH (FMS) Description	AVAILABLE ONLY IN BUSHING	
		Code	Description
12	3/8"	C	
16	1/2"	A, C	
20	5/8"	A, C	
24	3/4"	A, C	
28	7/8"	A, C	
32	1"	A, C	
Metric			
16	16 mm	R, S, U	
22	22 mm	R, S, U	
25	25 mm	R, S, U	

Boldface features are Bourns standard options. All others are available with higher minimum order quantities.