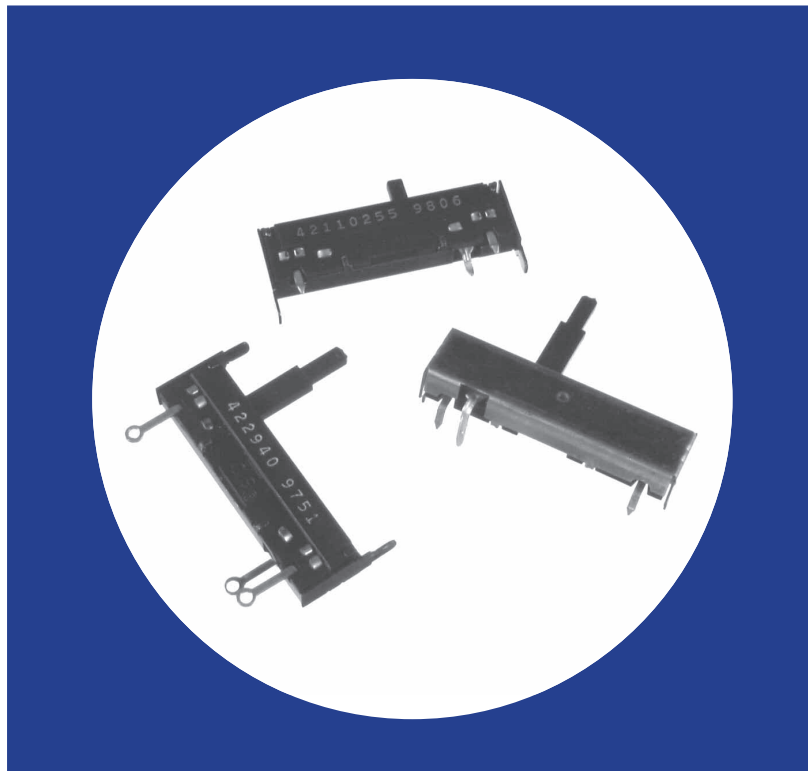## Linear Motion 1/4 Watt Composition Slide Controls

Features

- $1^1/_4$" (31.7mm) slider travel
- $^1/_4$ watt power rating
- Choice of resistance tapers
- Economical
- Wide resistance range
- Choice of mounting styles
- RoHS compliant

Electrical and Mechanical Specifications

Resistance Range
200 ohms through 5 megaohms

Resistance Tolerance
Standard: ±20%
Available: ±10%

Power Rating, Watts
$^1/_4$ watt @ 55°C derated to no load @ 85°C,
linear taper, control mounted on steel panel
4" x 4" x .050" (101.6mm x 101.6mm x 1.27mm).

Voltage Rating
Across end terminals:
Linear curves — 500 VDC
Tapered curves — 350 VDC
(Not to exceed wattage ratings)
Between case and end terminals:
1080 VAC RMS

Resistance Tapers
Standard: Linear
Special: Available upon request

Operating Temperature
0°C - +70°C

Slide Travel
Mechanical — $1^1/_4$ inches (31.7mm)
Effective — $1^1/_4$ inches (31.7mm)

Shaft Information
See illustrations, page 2.

Operating Force
Either direction 1 to 9 in-oz. (28 to 256 gf-cm)
Measured .250" (6.35mm) from base of slider.

Stop Strength
Maximum — 35 in-lbs. (15.9 kg-cm) measured
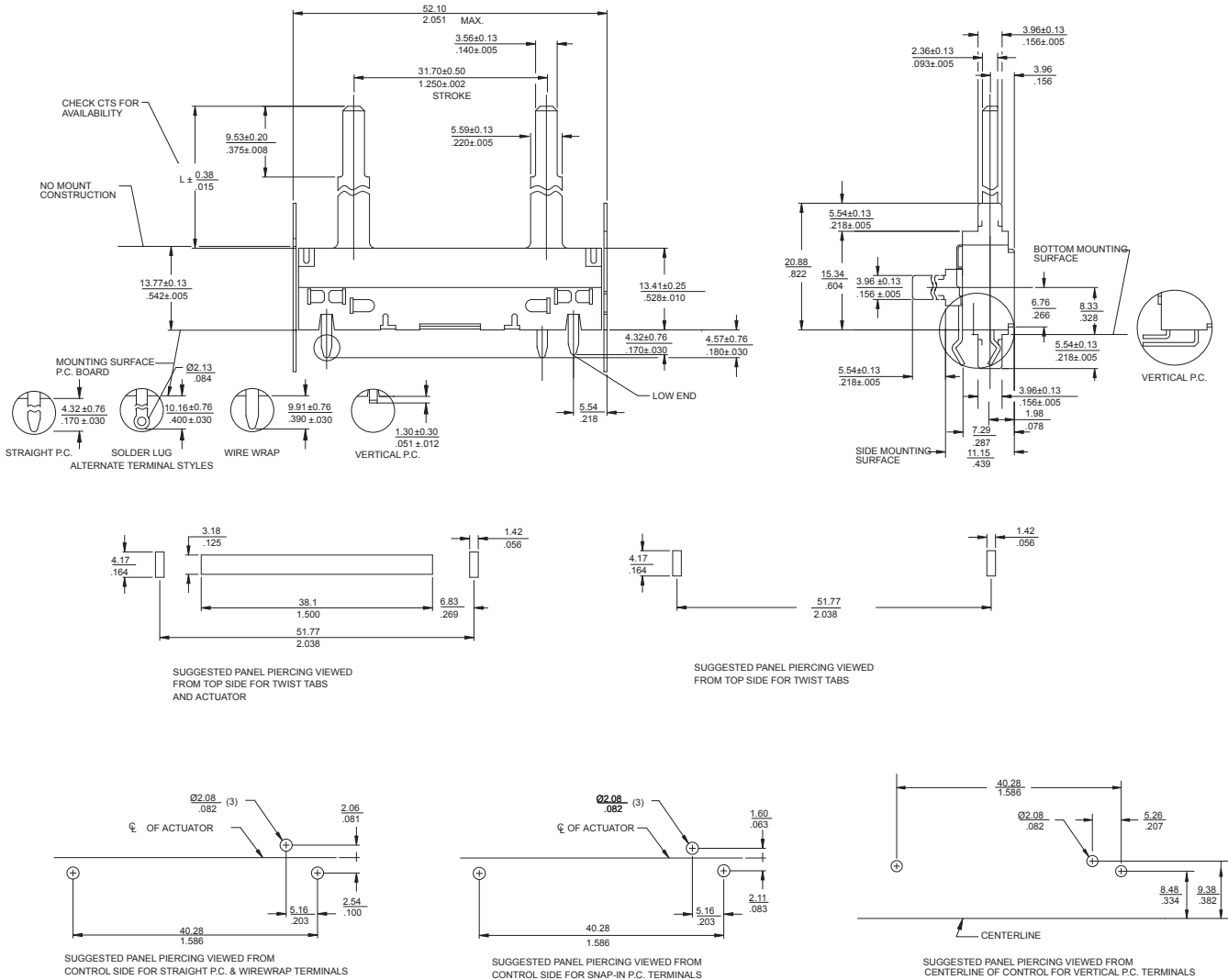at base of slider.

Terminal Information
Straight, vertical or snap-in to printed circuit board,
wirewrap or solder lug styles.

Mounting Information
Top, bottom, side or no twist tab mounting —
refer to illustrations, page 2.

CTS Series 442

CHECK CTS FOR AVAILABILITY

NO MOUNT CONSTRUCTION

L ± 0.38 / .015

52.10 / 2.051 MAX.

3.56±0.13 / .140±.005

31.70±0.50 / 1.250±.002 STROKE

9.53±0.20 / .375±.008

5.59±0.13 / .220±.005

13.77±0.13 / .542±.005

13.41±0.25 / .528±.010

4.32±0.76 / .170±.030

4.57±0.76 / .180±.030

5.54 / .218

LOW END

MOUNTING SURFACE P.C. BOARD

Ø2.13 / .084

4.32±0.76 / .170 ±.030

STRAIGHT P.C.

10.16±0.76 / .400±.030

SOLDER LUG

ALTERNATE TERMINAL STYLES

9.91±0.76 / .390 ±.030

WIRE WRAP

1.30 ±0.30 / .051 ±.012

VERTICAL P.C.

3.96±0.13 / .156±.005

2.36±0.13 / .093±.005

3.96 / .156

5.54±0.13 / .218±.005

20.88 / .822

15.34 / .604

3.96±0.13 / .156 ±.005

5.54±0.13 / .218±.005

BOTTOM MOUNTING SURFACE

6.76 / .266

8.33 / .328

5.54±0.13 / .218±.005

VERTICAL P.C.

3.96±0.13 / .156±.005

1.98 / .078

7.29 / .287

11.15 / .439

SIDE MOUNTING SURFACE

3.18 / .125

4.17 / .164

1.42 / .056

38.1 / 1.500

6.83 / .269

51.77 / 2.038

SUGGESTED PANEL PIERCING VIEWED FROM TOP SIDE FOR TWIST TABS AND ACTUATOR

4.17 / .164

1.42 / .056

51.77 / 2.038

SUGGESTED PANEL PIERCING VIEWED FROM TOP SIDE FOR TWIST TABS

Ø2.08 / .082 (3)

℄ OF ACTUATOR

2.06 / .081

5.16 / .203

2.54 / .100

40.28 / 1.586

SUGGESTED PANEL PIERCING VIEWED FROM CONTROL SIDE FOR STRAIGHT P.C. & WIREWRAP TERMINALS

Ø2.08 / .082 (3)

℄ OF ACTUATOR

1.60 / .063

5.16 / .203

2.11 / .083

40.28 / 1.586

SUGGESTED PANEL PIERCING VIEWED FROM CONTROL SIDE FOR SNAP-IN P.C. TERMINALS

40.28 / 1.586

Ø2.08 / .082

5.26 / .207

8.48 / .334

9.38 / .382

CENTERLINE

SUGGESTED PANEL PIERCING VIEWED FROM CENTERLINE OF CONTROL FOR VERTICAL P.C. TERMINALS

DIMENSION: mm / INCH

Ordering Information

442   T   A   2   T   103   B   D   N

MOUNTING STYLE
T – TOP MOUNT
B – BOTTOM MOUNT
S – SIDE MOUNT
N – NO MOUNTING TABS

TRAVEL
A – 1.250" (31.7mm)

ACTUATOR LENGTH
2 – .250" (6.35mm)
3 – .375" (9.53mm)
4 – .500" (12.7mm)
5 – .625" (15.9mm)
6 – .750" (19.1mm)
7 – .875" (22.2mm)
8 – 1.000" (25.4mm)
R – .218" (5.54mm)
S – .313" (7.98mm)
T – .438" (11.13mm)

TERMINAL STYLE
T – SOLDER LUG
X – STRAIGHT P.C.
W– WIREWRAP
H – HOOK TYPE, SNAP-IN
U – VERTICAL P.C.

RESISTANCE CODE EXAMPLES

CODE	RESISTANCE
501	500 OHMS
102	1K
252	2.5K
502	5K
103	10K
253	25K
104	100K
105	1MEG

RESIST TOL
A – ±10%
B – ±20%
C – ±30%

TAPER
D – LINEAR
A – CW 10% AUD
B – CCW 10% AUD

SPECIALS
N – NO SPECIALS
C – CENTER DETENT

9/21/06

CTS Electronic Components

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