Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

7x7mm Miniature Rotary DIP Switch

Features

Optimized Mechanical Features
- Robust metal bracket design
- Standard through hole and surface mount gull-wing terminal configurations
- Binary Coded Decimal, Hexadecimal code and Single pole output
- Clockwise or counterclockwise rotation

Optimized Contact System
- Robust wiping contact
- Precise detents

Materials
- Gold plated beryllium copper contacts
- Tin coated terminals for better solderability
- High temperature materials (UL94V-0)
- RoHS compliant

Electrical and Mechanical Specifications

Switch Options
4,10,16 positions

Output
Binary Coded Decimal
Hexadecimal Code
Single Pole

Switch Contact Resistance
100 milliohms maximum

Insulation Resistance
1000 Mohms minimum between insulated terminals

Dielectric Strength
250 VAC for 1 minute between adjacent terminals

Maximum Rating
100 mA ¸50 VDC

Minimum Load
1µA 20m VDC

Operating Temperature
- 40°C to +85°C

Rotational Torque
40~200 gf-cm
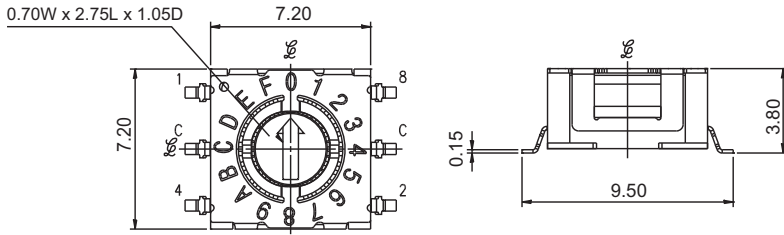
Actuation Life
10,000 steps

Allowable Solder Time
Reflow soldering up to 5 seconds at 260°C max.
Wave soldering up to 10 seconds at 260°C max.
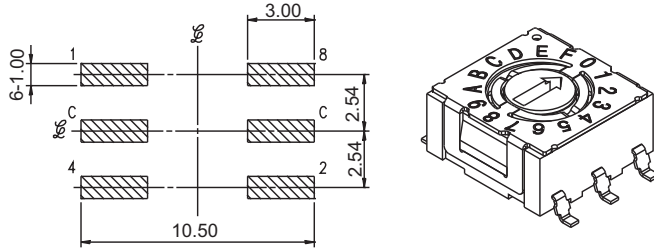Manual soldering up to 4 seconds at 350°C max.

Packaging
Standard : Anti-static tube packaging
Optional : Tape and reel packaging

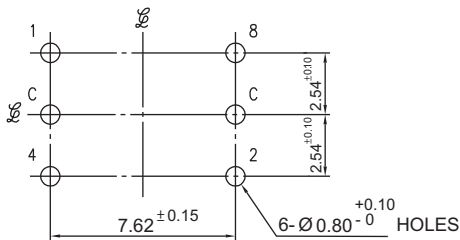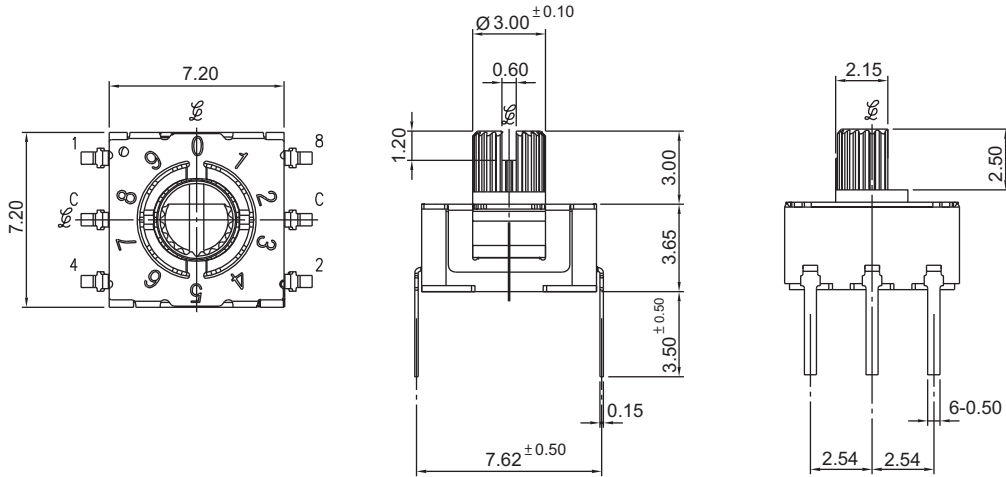## CTS SERIES 220AM_10,16R - Surface Mount Gull Wing, 10 and 16 Position

CODE TABLE

0.70W x 2.75L x 1.05D

7.20

7.20

0.15

3.80

9.50

PCB LAYOUT

3.00

6-1.00

2.54

2.54

10.50

DIMENSION : mm
STANDARD TOLERANCE :
.XX (2 PLACE) : ±0.30

POSITIONS	CODE			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
B	●	●		●
C			●	●
D	●		●	●
E		●	●	●
F	●	●	●	●

Dot indicates terminal to
common connection. All switches
are continuous rotation.

10 Position - Numbered 0 through 9
16 Position - Numbered 0 through F

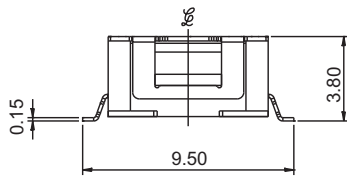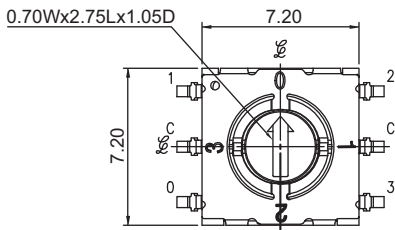## CTS SERIES 220AD_10,16 - Standard Through Hole, 10 and 16 Position

7.20

7.20

Ø 3.00 ±0.10

0.60

1.20

3.00

3.65

3.50 ±0.50

0.15

7.62 ±0.50

2.15

2.50

2.54   2.54

6-0.50

CODE TABLE

1

C

4

C

2

2.54 +0.010

2.54 +0.10

2.54 +0.10

7.62 ±0.15

6- Ø 0.80 -0 +0.10   HOLES

DIMENSION : mm
STANDARD TOLERANCE :
.XX (2 PLACE) : ±0.30

POSITIONS	CODE			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
B	●	●		●
C			●	●
D	●		●	●
E		●	●	●
F	●	●	●	●

Dot indicates terminal to
common connection. All switches
are continuous rotation.

10 Position - Numbered 0 through 9
16 Position - Numbered 0 through F

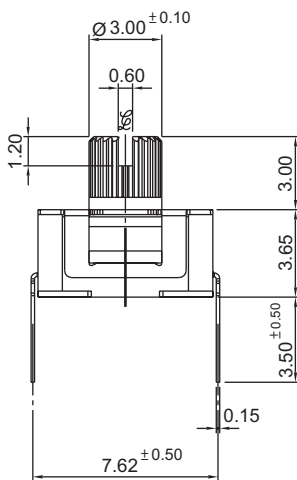## CTS SERIES 220AM_04R - Surface Mount Gull Wing, 4 Position

PCB LAYOUT
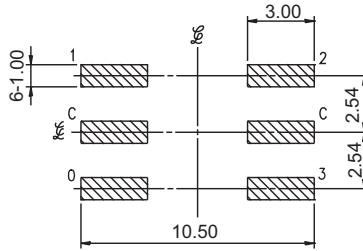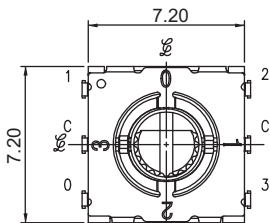
CODE TABLE

0.70Wx2.75Lx1.05D

7.20

7.20

3.00

6-1.00

2.54

2.54

10.50

	CODE			
POSITIONS	0	1	2	3
0	●			
1		●		
2			●	
3				●

Dot indicates terminal to common connection. All switches are continuous rotation.
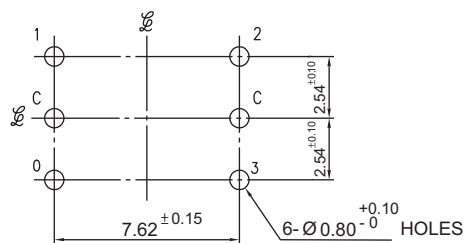
4 Position - Single pole

3.80

0.15

9.50

DIMENSION : mm
STANDARD TOLERANCE :
.XX (2 PLACE) : ±0.30

CTS SERIES 220AD_04 - Standard Through Hole, 4 Position
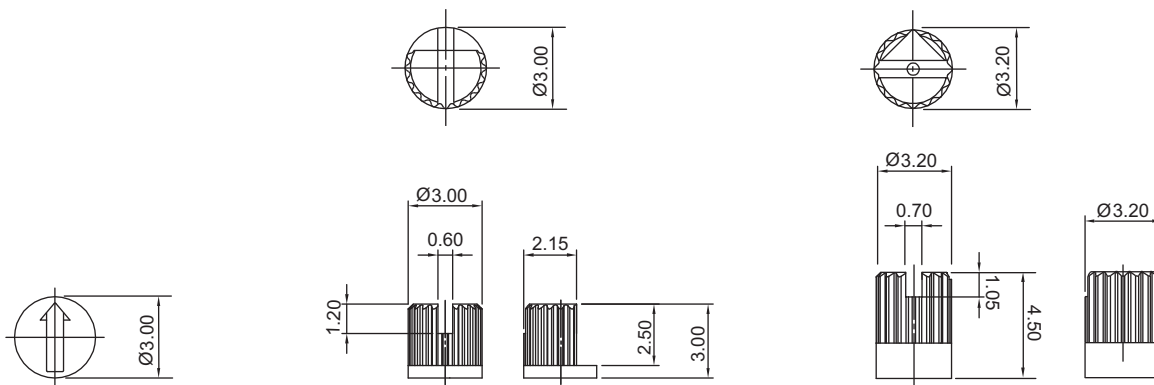
PCB LAYOUT

CODE TABLE

7.20

7.20

2.54 ±0.10

2.54 ±0.10

7.62 ±0.15

6- Ø 0.80 +0.10 -0 HOLES

	CODE			
POSITIONS	0	1	2	3
0	●			
1		●		
2			●	
3				●

Dot indicates terminal to common connection. All switches are continuous rotation.

4 Position - Single pole

Ø 3.00 ±0.10

0.60

1.20

3.00

3.65

3.50 ±0.50

0.15

7.62 ±0.50

2.15

2.50

6-0.50

2.54   2.54

DIMENSION : mm
STANDARD TOLERANCE :
.XX (2 PLACE) : ±0.30

9/16/15

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Actuator Options

A: FLUSH ARROW ROTOR

B: KNURLED, SLOTTED, FLATTED SHAFT

C: KNURLED, SLOTTED SHAFT

Ø3.00

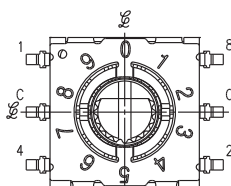Ø3.00
0.60
1.20

2.15
2.50
3.00

Ø3.20

Ø3.20
0.70
1.05
4.50

Ø3.20

DIMENSION : mm
STANDARD TOLERANCE :
.XX (2 PLACE) : ±0.30

Position Options
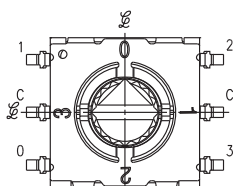
04: 4 POSITIONS

10: 10 POSITIONS
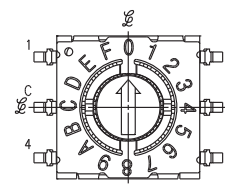
16: 16 POSITIONS

Ordering Information

220 – AM A 04 R

BLANK : TUBE PACKAGING
R : TAPE & REEL PACKAGING (SURFACE MOUNT ONLY)

04: 4 POSITIONS
10: 10 POSITIONS
16: 16 POSITIONS

A: FLUSH ARROW ROTOR
B: KNURLED, SLOTTED, FLATTED SHAFT
C: KNURLED, SLOTTED SHAFT

AM: SURFACE MOUNT GULL WING, 3.8MM HEIGHT
AD: STANDARD THROUGH HOLE, 3.6MM HEIGHT