



THE DATASHEET OF 221AMA16R

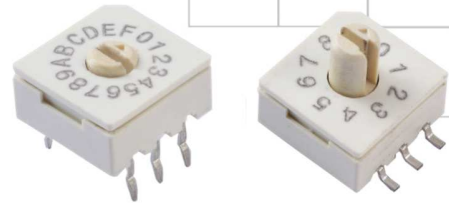
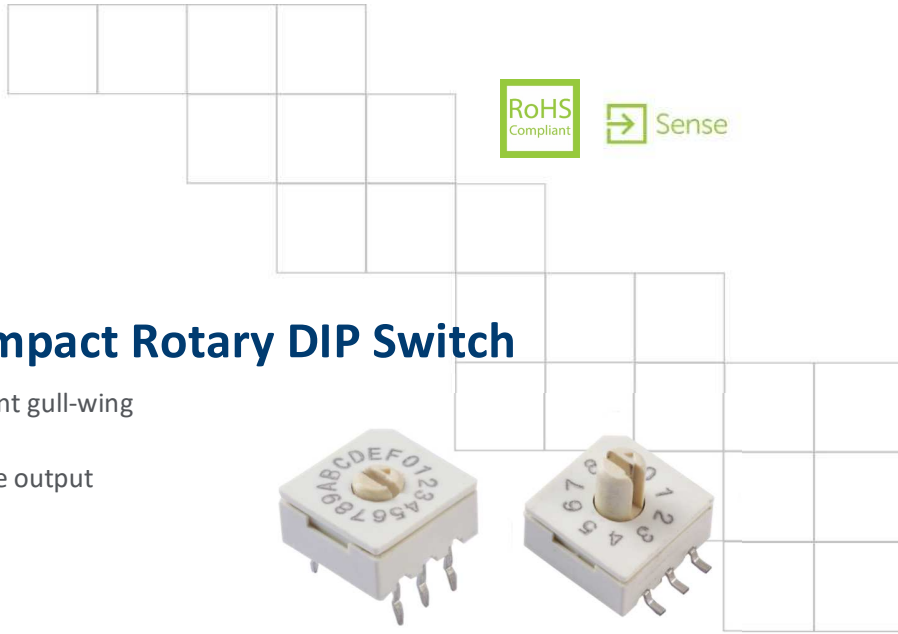




Series 221

10x10mm IP67 Rated Compact Rotary DIP Switch

- Standard through hole and surface mount gull-wing terminal configurations
- Binary coded decimal, Hexadecimal code output
- IP67 protection
- Clockwise or counterclockwise rotation
- Suitable for board spray washing



Ordering Information

Series	Terminal Type	Actuator Height	Number of Position	Packaging Type
221	AM	A	10	R

Code	Spec.
AM	Surface mount gull wing
AD	Standard through hole

Code	Spec.
A	Flush arrow rotor & slotted rotor
B	Arrow & slotted, 4.32mm height shaft
C	Arrow & slotted, 6.86mm height shaft

Code	Spec.
10	10 Positions
16	16 Positions

Code	Spec.
BLANK	Tube packaging, through hole switch
R	Tape & reel packaging (surface mount only)

Notes: Contact CTS for other common features not listed.



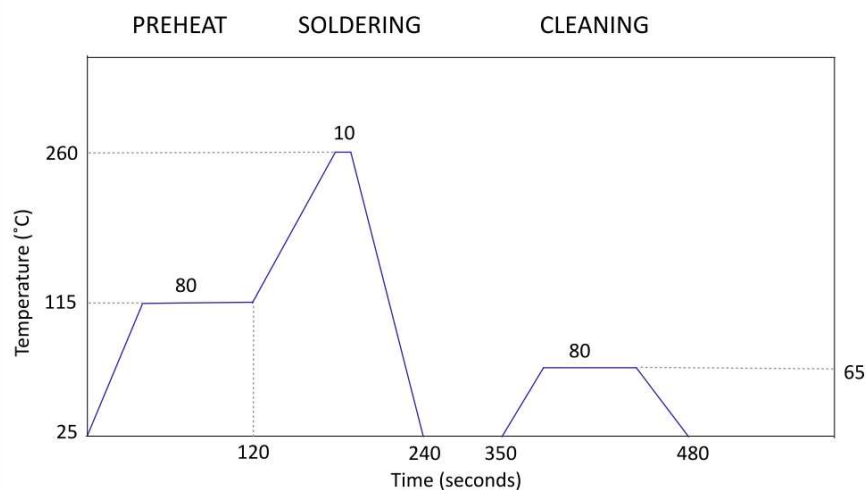
Electrical Specifications

Parameter	Conditions & Remarks	Min	Max	Unit
Output	Binary coded decimal Hexadecimal		10 16	position
Contact Resistance			80	milliohms
Insulation Resistance	Between insulated terminals	1000		megohms
Dielectric Strength	350 Vac between adjacent switches		1	minute
Actuation Life			20,000	steps
Nonswitching Rating			100	mA
			or 50	or Vdc
Load		1 μ A 20m		VDC

Mechanical and Environmental

Soldering	Maximum reflow temperature, 260°C for 10 seconds Maximum wave temperature, 260°C for 10 seconds Maximum manual temperature, 350°C for 5 seconds
RoHS	Lead-Free. Fully compliant to RoHS
Rotational Torque:	144~432 gf-cm
Waterproof Grade	IP67
Marking:	Special top marking available-consult CTS
Packaging :	Standard anti-static tube packaging for through hole terminal Standard tape and reel packaging for gull wing terminal
Operating Temperature Range:	-40°C to +85°C
Storage Temperature Range:	-40°C to +85°C

Soldering Profile



Mechanical Specifications

Figure 1 – Surface Mount Gull Wing

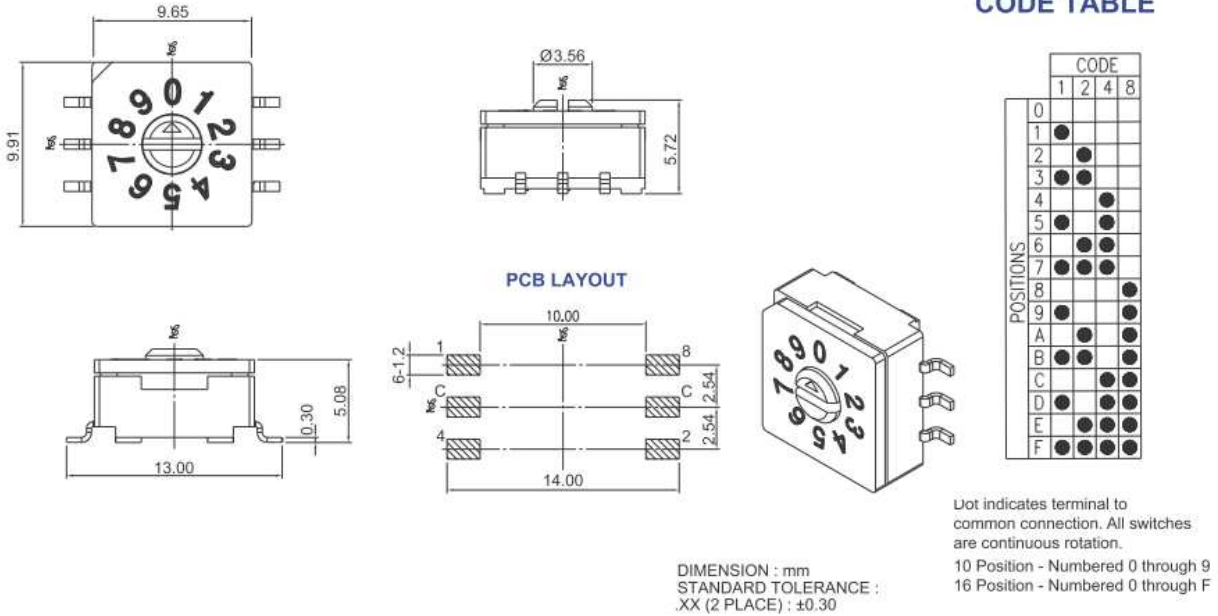
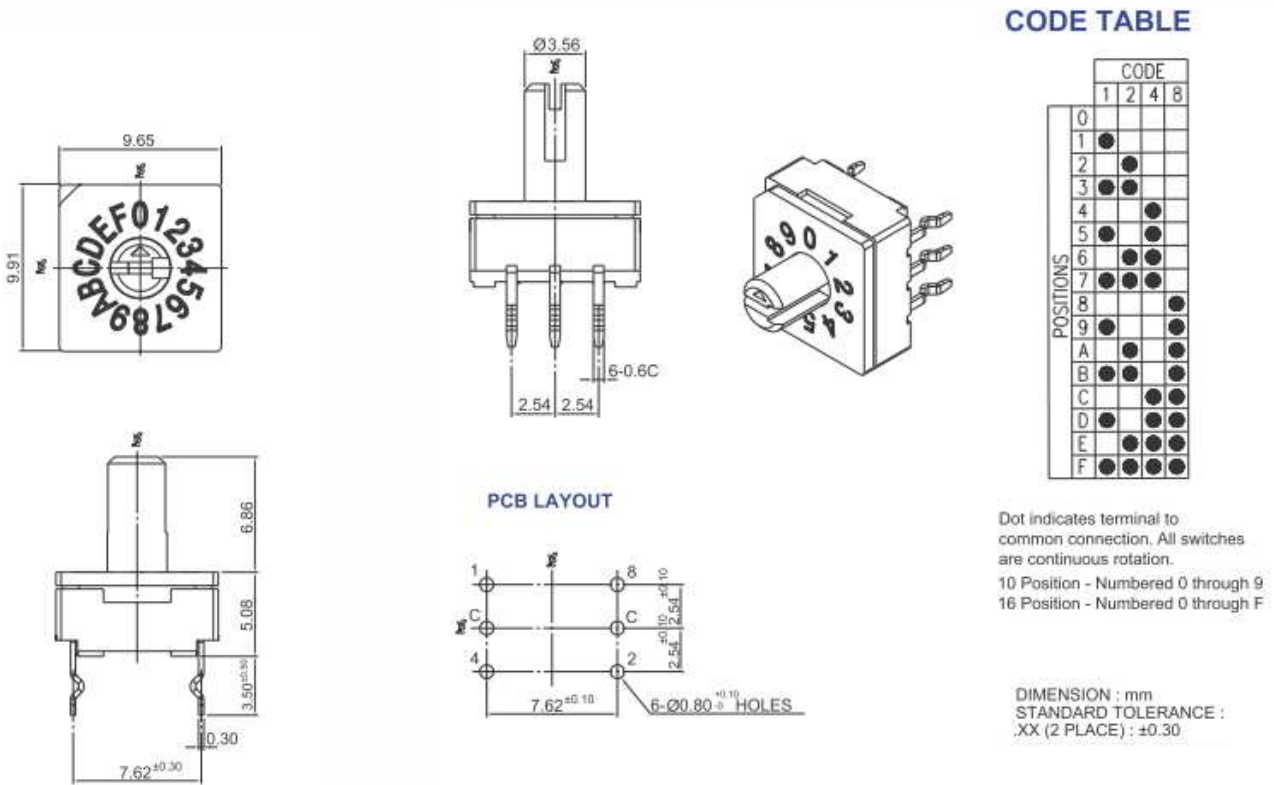
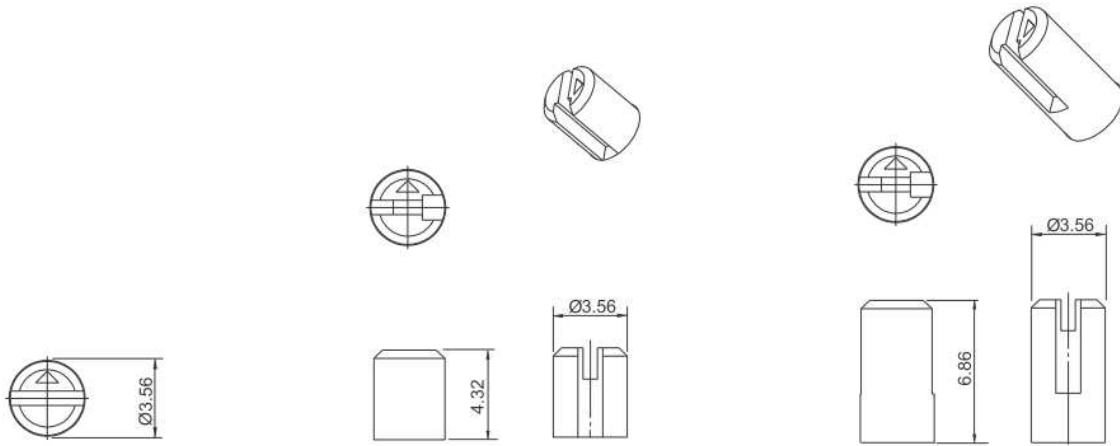


Figure 2 – Standard Through Hole





A: FLUSH ARROW & SLOTTED ROTOR

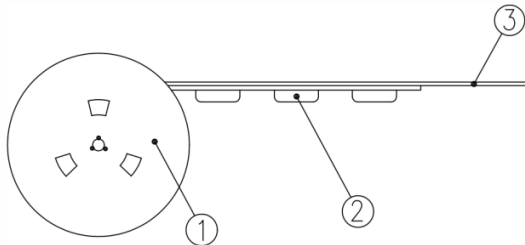
B: ARROW & SLOTTED SHAFT

C: ARROW & SLOTTED SHAFT

Packing: Tape and Reel

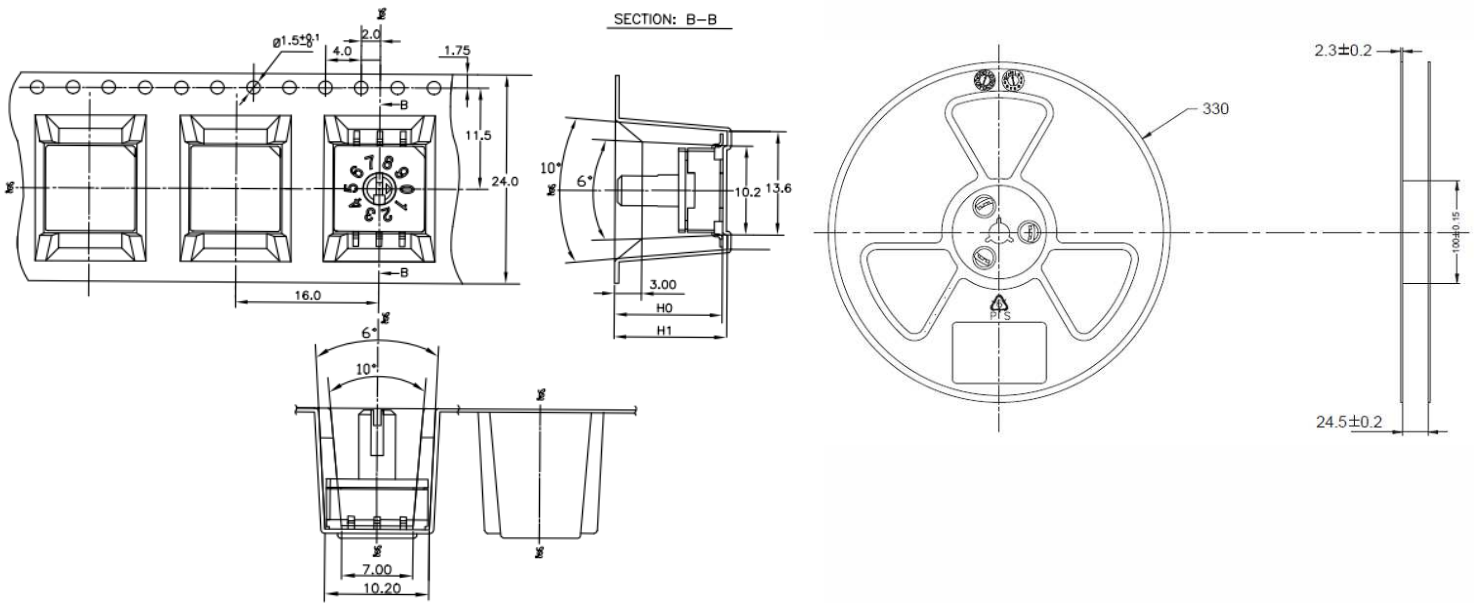
The packing specifications:

1. Structure and materials:



No	PART NAME	MATERIAL
①	REEL	POLYSTYRENE
②	CARRIER TAPE	POLYSTYRENE
③	COVER TAPE	POLYESTER

2. More than 10 empty pockets should remain at each end of the carrier tape for each reel.
3. Shortage of less than 10 pcs a reel is acceptable but no more than 3 consecutive empty pockets are allowed.
4. Stripping strength of cover tape is between 10 gf to 130 gf and stripping angle should be within 165°~180°.
5. The product in the pocket of carrier tape should be placed in a specified correct position.
6. Tape and reel per EIA-481.
7. Dimensions:





Unit: mm

CTS P/N	H0	H1	Product	Package
			total height	quantity (Pcs/reel)
221AMAxxR	5.92	6.42	5.72	700
221AMBxxR	9.60	10.10	9.40	450
221AMCxxR	12.14	12.64	11.94	350

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  View [221AMA16R](#) on WIN SOURCE
-  [CTS Electrocomponents](#) Information

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management