CTS Electrocomponents

Series 206RA/ 208RA Data Sheet
Right Angle Panel DIP Switch

Right Angle Panel DIP Switches

Features

Optimized Mechanical Features

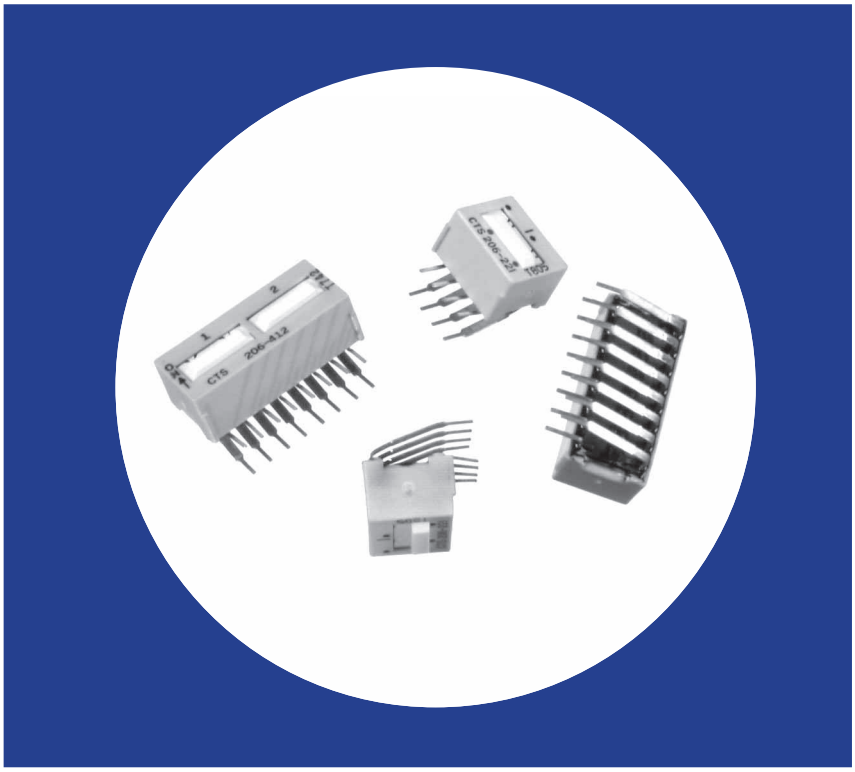
- Designed for panel applications
  Saves cost of right angle socket
- Multiple circuit configurations available
- Standard 2.54mm (.100") x 2.54mm (.100") centers, uses minimum PCB real estate
- Sealed version optional: assures contaminant-free switch operation after wave soldering and cleaning
- Available with low profile, standand, or extended actuators for SPST circuitry

Optimized Contact System

- Contact wiping action on make and break
- Integral terminal and contact locked into high temperature plastic base
- Electrostatic discharge shield rated to 22 KV

Materials

- Series 206RA, gold plated contacts for long-term contact corrosion resistance
- Series 208RA, tin plated contacts
- UL 94V-0 plastics
- RoHS compliant



Series 206RA – Premium Gold Plated Contacts
Series 208RA – Economical Tin Plated Contacts

Electrical and Mechanical Specifications

Switch Function
SPST - 2 through 10 and 12 positions
SPDT&DPST- 1 through 6 positions
DPDT&4PST - 1 through 3 positions
3PST - 1 through 4 positions

Switch Contact Resistance

Switch Series	Initial, max.	End of life , max.
206RA	50 milliohms	100 milliohms
208RA	100 milliohms	500 milliohms

Insulation Resistance
1,000 megohms minimum between insulated terminals

Dielectric Strength
500 VAC for 1 minute between adjacent switches

Nonswitching Rating
100 mA or 50 VDC maximum

Switch Capacitance
5.0 pF maximum between adjacent closed switches

Operating Temperature
–55°C to +85°C

Actuation Life
Series 206RA: 10,000 cycles switching 50 mA @ 24 VDC
Series 208RA: 2,000 cycles switching 50 mA @ 24 VDC

Allowable Solder Time
Wave soldering up to 5 seconds at 260°C

Vibration
Per MIL-STD-202F, method 204D, condition B (.06" or 15 G's between 10 HZ to 2K HZ) with no contact inconsistencies greater than 1 microsecond

Shock
Per MIL-STD-202F, method 213B, condition A (50 G's) with no contact inconsistencies greater than 1 microsecond

Sealing
Bottom epoxy seal optional
Top tape seal optional

Marking
Special side or top marking available-consult CTS

Packaging
Standard : Anti-Static tube packaging

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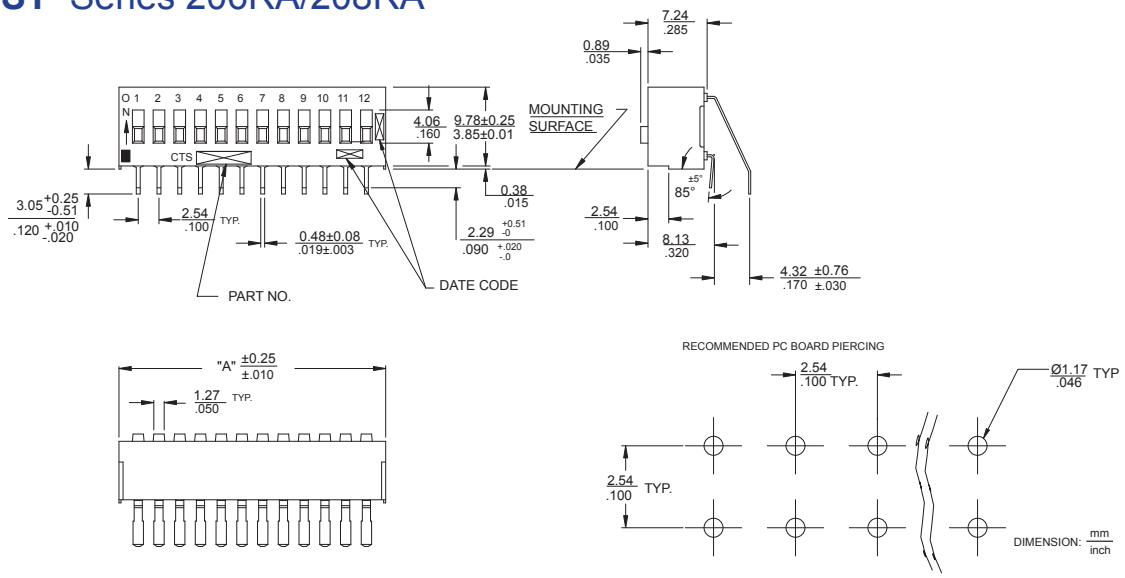
SPST Series 206RA/208RA



Please find panel drawing of 206/208 RA DIP switches with SPDT,DPST,DPDT,3PST, or 4PST circuitry from 206/208 series data sheet

Ordering Information

206/208 – 1 2 2 RA LP S T N

NUMBER OF POLES
BLANK – (FOR SPST)
1 – SINGLE POLE
2 – DOUBLE POLES
3 – 3 POLES
4 – 4 POLES

NUMBER OF THROWS
BLANK – (FOR SPST)
1 – SINGLE THROW
2 – DOUBLE THROWS

NUMBER OF SWITCH POSITIONS
1 – 1 POSITION
2 – 2 POSITIONS
3 – 3 POSITIONS
4 – 4 POSITIONS
5 – 5 POSITIONS
6 – 6 POSITIONS
7 – 7 POSITIONS
8 – 8 POSITIONS
9 – 9 POSITIONS
10 – 10 POSITIONS
12 – 12 POSITIONS

ACTUATOR HEIGHT
BLANK – STANDARD(0.89mm/.035")
* **E** – EXTENDED(3.43mm/.135")
** **LP** – LOW PROFILE(Flush)

* Extended: SPST only
** Low profile: SPST & SPDT only

BOTTOM EPOXY SEAL
BLANK - NO EPOXY SEAL
S - EPOXY SEAL

TOP TAPE SEAL
BLANK – NO TOP TAPE SEAL
***T** – TOP TAPE SEAL
* Not available on extended actuator

ACTUATION PRESET
BLANK – SHIP AT "OFF" POSITION
N – SHIP AT "ON" POSITION

Standard Part

Dimensions	SPST Switches		SPDT&DPST Switches			3PST Switches		DPDT/ 4PST Switches		
"A" Overall (mm/inch)	No of SW positions	SPST P/N	No of SW positions	SPDT P/N	DPST P/N	No of SW positions	3PST P/N	No of SW positions	DPDT P/N	4PST P/N
7.26 / .286	2	206/208- 2 RA	1	206/208-121RA	206/208-211RA	—	—	—	—	—
9.80 / .386	3	206/208- 3 RA	—	—	—	1	206/208-311RA	—		—
12.34 / .486	4	206/208- 4 RA	2	206/208-122RA	206/208-212RA	—	—	1	206/208-221RA	206/208-411RA
14.88 / .586	5	206/208- 5 RA	—	—	—	—	—	—	—	—
17.42 / .686	6	206/208- 6 RA	3	206/208-123RA	206/208-213RA	2	206/208-312RA	—	—	—
19.96 / .786	7	206/208- 7 RA	—	—	—	—	—	—	—	—
22.50 / .886	8	206/208- 8 RA	4	206/208-124RA	206/208-214RA	—	—	2	206/208-222RA	206/208-412RA
25.04 / .986	9	206/208- 9 RA	—	—	—	3	206/208-313RA	—	—	—
27.58 / 1.086	10	206/208-10 RA	5	206/208-125RA	206/208-215RA	—	—	—	—	—
32.66 / 1.286	12	206/208-12 RA	6	206/208-126RA	206/208-216RA	4	206/208-314RA	3	206/208-223RA	206/208-413RA

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