



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!



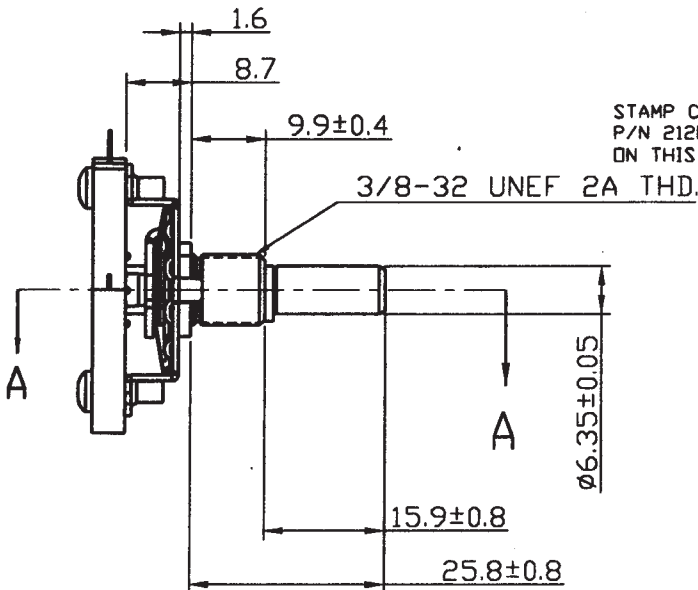
Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

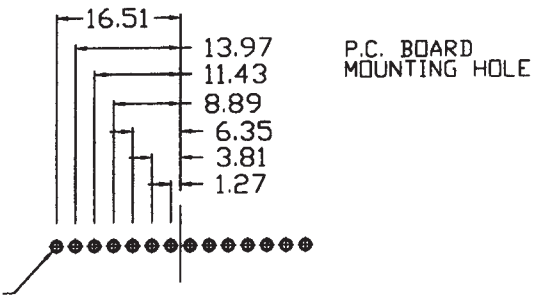
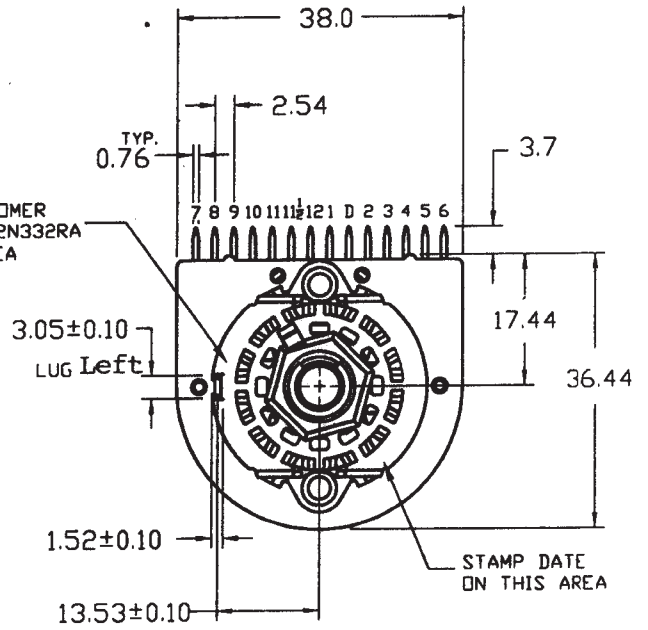
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





STAMP CUSTOMER
P/N 212P0112N332RA
ON THIS AREA



P.C. BOARD
MOUNTING HOLE

POSITION:		12					
POSITION	CHECK BETWEEN TERMINALS	OPEN	CLOSED	POSITION	CHECK BETWEEN TERMINALS	OPEN	CLOSED
11	11 ¹ / ₂ - 5	X					
10	11 ¹ / ₂ - 4	X					
9	11 ¹ / ₂ - 3	X					
8	11 ¹ / ₂ - 2	X					
7	11 ¹ / ₂ - 1	X					
6	11 ¹ / ₂ - 12	X					
5	11 ¹ / ₂ - 11	X					
4	11 ¹ / ₂ - 10	X					
3	11 ¹ / ₂ - 9	X					
	11 ¹ / ₂ - 8	X					
2	11 ¹ / ₂ - 7	X					
	11 ¹ / ₂ - AD	X					
1	11 ¹ / ₂ - 7	X		12	11 ¹ / ₂ - 6		X
POSITION	CHECK BETWEEN TERMINALS	OPEN	CLOSED	POSITION	CHECK BETWEEN TERMINALS	OPEN	CLOSED

CIRCUIT CONNECTIONS

NOTES :

- PRINT IS ACCORDING TO JIT SUPPLY P/N 212P0112N332RA
- LOCK WASHER & MOUNTING NUT MUST BE SHIPPED SEPARATELY (UNASSEMBLED) FROM SELECTOR SWITCH
LOCKWASHER P/N 1220A
MOUNTING NUT P/N 45T-3
ADJUST STOP P/N 215-33-003-01-53
- STOPS MUST BE LOCATED ON POSITION 11 ONLY
- WAFER CONFORM TO 212-95-P02-00-00
- FOR ADDITIONAL REQUIREMENTS SEE CTS ENG.
SPEC #EN-SPE-212001

UNIT : MM

CTS COMPONENTS TAIWAN LTD.
KAOHSIUNG, TAIWAN, ROC

CAD LIST : ACAD(A)-RDC-227
FILE NAME : BM06042

PART NO. 212P0112N332RA		REV	CUSTOMER : DIGI-KEY	
SCALE : N/A	TOLERANCE UNLESS OTHERWISE SPECIFIED		DRAWN BY : C.E.Chen	APPROVED BY :
CTS TYPE : 212-T212-1	.X (1 PLACE) : ± 0.2 .XX (2 PLACE) : ± 0.05 ANGLE : ± 1.0°		CHECKED BY :	ISSUED DATE : 08/15/06'

CTS COMPONENTS TAIWAN, LTD.

ENGINEERING SPECIFICATION		SPEC NO. EN-SPE-212001A
SPECIFICATION : 212 SERIES SELECTOR SWITCH	DATE 03-19-02'	PAGE OF 1 OF 2

1.0 GENERAL :

- 1.0 THIS SPECIFICATION APPLIES TO THE SELECTOR SWITCH 212 SERIES
(ROTARY TYPE) STANDARD AND CUSTOMER CONFIGURATION
- 1.1 OPERATING TEMPERATURE RANGE : -20 °C TO +110 °C
- 1.2 STORAGE TEMPERATURE RANGE : -20 °C TO +110 °C

2.0 MECHANICAL CHARACTERISTICS :

- 2.1 INDEXING : DOUBLE BUMP SPRING HILL AND VALLEY DETENT WITH 30°
INDEXING FOR 2 THROUGH 12 POSITIONS OR CONTINUOUS ROTATION
- 2.2 DETENT ROTATIONAL LIFE : 25,000 CYCLES THRU 12 POSITIONS AND RETURN
AT 10 CYCLES PER MINUTE

TORQUE : AS REQUIRED UP TO 48 inch. oz (3.4 kg-cm)

- 2.3 STOP STRENGTH :
STANDARD : 15 inch-lbs (17 kg-cm)

- 2.4 MATERIAL :
SHAFT :
 ALUM BRASS BRASS WITH NI-PLATED
 BRASS WITH ZINC PLATED _____

- BUSHING :
 BRASS WITH NI-PLATED BRASS WITH ZINC PLATED
 BRASS _____

DETENT SPRING : STAINLESS STEELS ,OR SPRING BRASS DEPENDING ON TORQUE REQUIREMENT.

DETENT PLATE : STEEL

CONTACT : SILVER PLATED PHOSOPHER BRONZE

TERMINAL : SILVER PLATED BRASS STANDARD

STATOR : GLASS REINFORCED PPA UL FLAME CLASS 94V-0

ROTOR AND ROTOR COVER : NYLON 66 UL FLAME CLASS 94V-2

A	ITEM 4.0 ADDED	08-02-05	SM				
0	RELEASED	03-19-02	ML				
SYM	REVISION	DATE	BY	SYM	REVISION	DATE	BY

WRITTEN BY : S.M.TSAI REVIEWED BY : H.Y.LIN APPROVED BY : T.J.LEE	CUSTOMER : GENERAL DISTRIBUTION :
---	--

CTS COMPONENTS TAIWAN, LTD.

ENGINEERING SPECIFICATION		SPEC NO. EN-SPE-212001A
SPECIFICATION : 212 SERIES SELECTOR SWITCH	DATE 03-19-02'	PAGE OF 2 OF 2

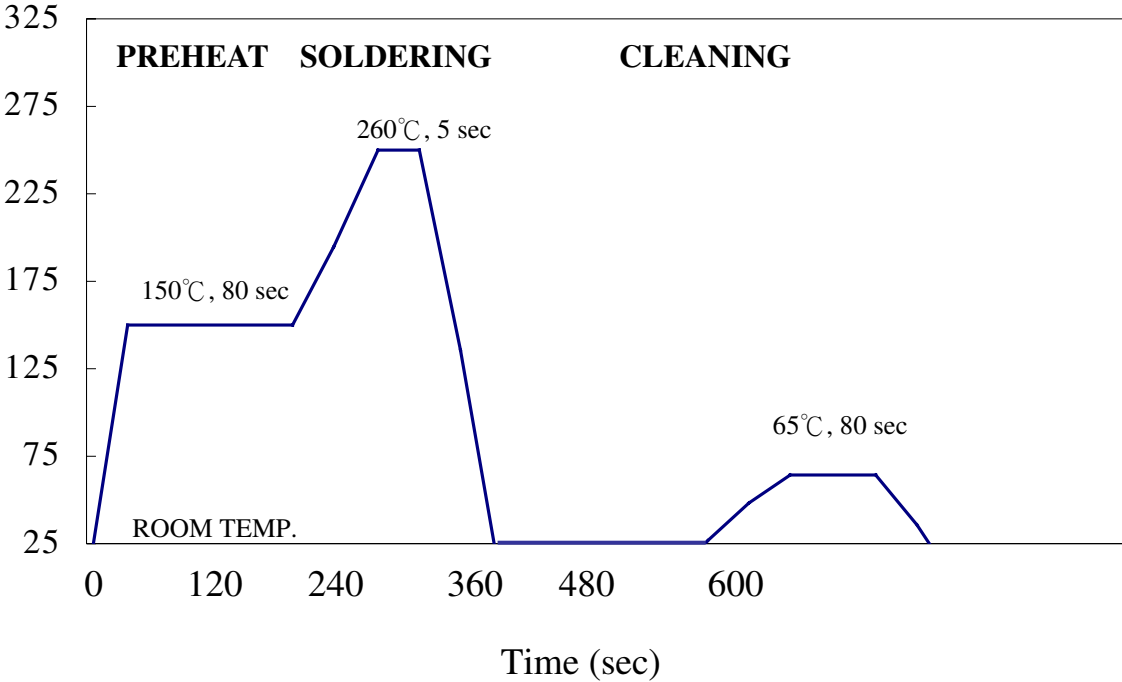
3.0 ELECTRICAL CHARACTERISTICS :

- 3.1 CONTACT RESISTANCE : 0.015 OHMS MAX MEASURED FROM ONE TERMINAL TO AN ADJACENT TERMINAL. (WHEN IS NOT ADJACENT, UP TO 180° APART, WILL MEASURE MUCH HIGHER DUE TO THE EXTRA METAL IN THE CIRCUIT) . THE CIRCUIT RESISTANCE CHECK MEASURE ALL THE METAL IN THE CIRCUIT.
- 3.2 CONTACT LIFE : ROTATION THROUGH 12 POSITIONS AND RETURN WITHOUT APPRECIABLE RISE IN CONTACT RESISTANCE
UNLOADED : 50,000 CYCLES
LOADED (RESISTIVE) : 10,000 CYCLES
- 3.3 RATING :
¾ AMP @ 125 VAC
¼ AMP @ 250 VDC (SHORTING TYPE ONLY)
½ AMP @ 125 VDC (SHORTING TYPE ONLY)
¼ AMP @ 28 VDC (SPECIAL RATING)
- 3.4 HI POT TEST :
BETWEEN ADJACENT 15 DEG. CIRCUITS : 750 VAC RMS FOR 1 MINUTE
BETWEEN GROUND AND NEAREST TERMINAL : 1500 VAC FOR 1 MINUTE
THE TEST VOLTAGE SHALL BE APPLIED BETWEEN ALL EVEN-NUMBERED CONTACTS TIED TOGETHER AND ALL ODD-NUMBERED CONTACTS TIED TOGETHER AND BETWEEN EACH OF THIS GROUP AND THE SWITCH FRAME FOR EACH SWITCH.

4.0 RoHS COMPLIANCE : THIS PART IS COMPLIANT WITH EU RoHS DIRECTIVE.

SYM	REVISION	DATE	BY	SYM	REVISION	DATE	BY
WRITTEN BY : S.M.TSAI				CUSTOMER : GENERAL			
REVIEWED BY : H.Y.LIN				DISTRIBUTION :			
APPROVED BY : T.J.LEE							

212 SOLDERING PROCESS



1. The temperature is referring to PC board, soldering or cleaning water temperature.