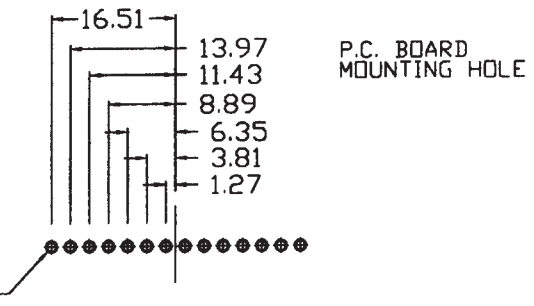
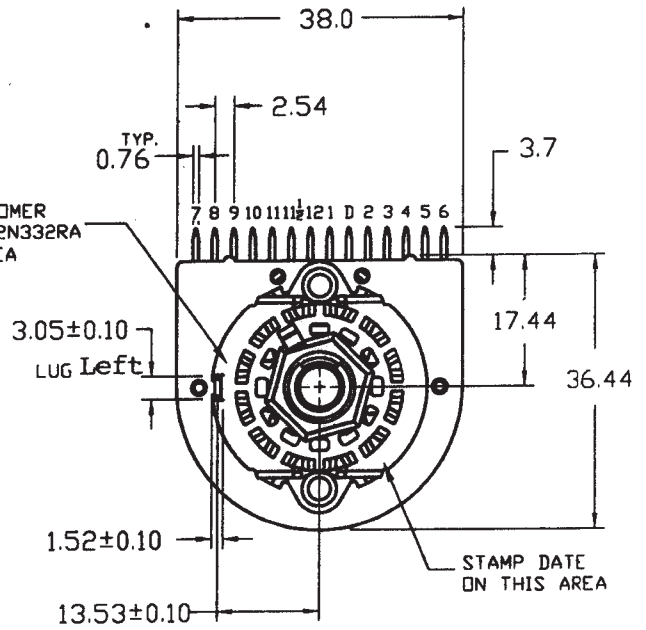


STAMP CUSTOMER  
P/N 212P0112N332RA  
ON THIS AREA



P.C. BOARD  
MOUNTING HOLE

POSITION: 12		OPEN	CLOSED	POSITION	CHECK BETWEEN TERMINALS	OPEN	CLOSED
11	11 <sup>1</sup> / <sub>2</sub> - 5	X					
10	11 <sup>1</sup> / <sub>2</sub> - 4	X					
9	11 <sup>1</sup> / <sub>2</sub> - 3	X					
8	11 <sup>1</sup> / <sub>2</sub> - 2	X					
7	11 <sup>1</sup> / <sub>2</sub> - 1	X					
6	11 <sup>1</sup> / <sub>2</sub> - 12	X					
5	11 <sup>1</sup> / <sub>2</sub> - 11	X					
4	11 <sup>1</sup> / <sub>2</sub> - 10	X					
3	11 <sup>1</sup> / <sub>2</sub> - 9	X					
	11 <sup>1</sup> / <sub>2</sub> - 8	X					
2	11 <sup>1</sup> / <sub>2</sub> - 7	X					
	11 <sup>1</sup> / <sub>2</sub> - AD	X					
1	11 <sup>1</sup> / <sub>2</sub> - 7	X	12	11 <sup>1</sup> / <sub>2</sub> - 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
CTS TYPE : 212-T212-1	.X (1 PLACE) : ± 0.2 .XX (2 PLACE) : ± 0.05 ANGLE : ± 1.0°	APPROVED BY :
		CHECKED BY :
		ISSUED DATE : 08/15/06

# CTS COMPONENTS TAIWAN, LTD.

<b>ENGINEERING SPECIFICATION</b>		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.

<b>ENGINEERING SPECIFICATION</b>		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

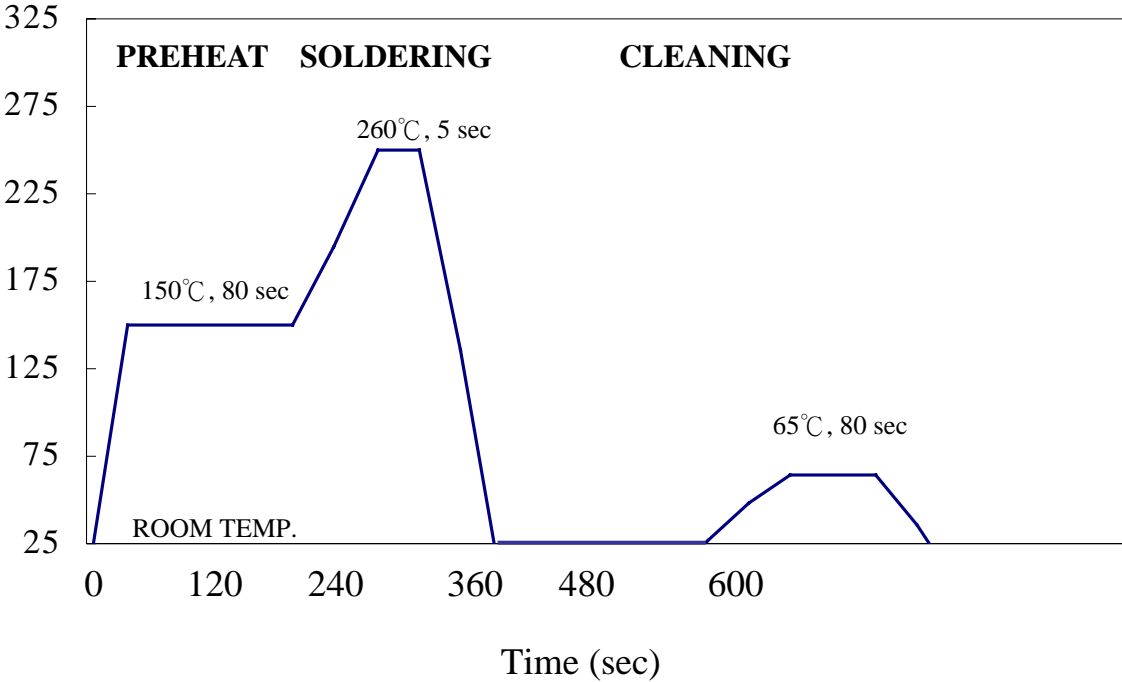
3.3 RATING :  
¾ AMP @ 125 VAC  
¼ AMP @ 250 VDC ( SHORTING TYPE ONLY )  
½ AMP @ 125 VDC ( SHORTING TYPE ONLY )  
¼ AMP @ 28 VDC ( SPECIAL RATING)

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.