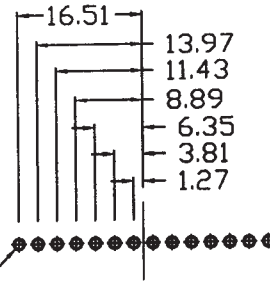
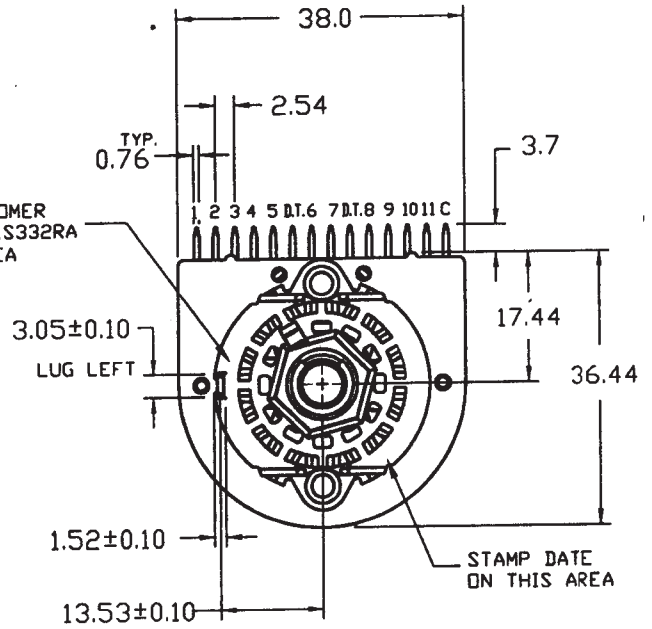


STAMP CUSTOMER  
P/N 212P0111S332RA  
ON THIS AREA



P.C. BOARD  
MOUNTING HOLE

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

CIRCUIT CONNECTIONS

NOTES :

- PRINT IS ACCORDING TO BERNE P/N 212P0111S332RA
- LOCK WASHER & MOUNTING NUT & ADJUST STOP 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
- SHORTING CONTACTS AT ALL POSITIONS
- 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 : 06043

PART NO.	212P0111S332RA	REV	CUSTOMER :	DIGI-KEY
SCALE :	N/A	TOLERANCE UNLESS OTHERWISE SPECIFIED	DRAWN BY :	C.E.Chen
CTS TYPE :	212-P212-1	.X (1 PLACE) : ± 0.3 .XX (2 PLACE) : ± 0.13 ANGLE : ± 1.0°	CHECKED BY :	<i>[Signature]</i>
			APPROVED BY :	<i>BeChu</i>
			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

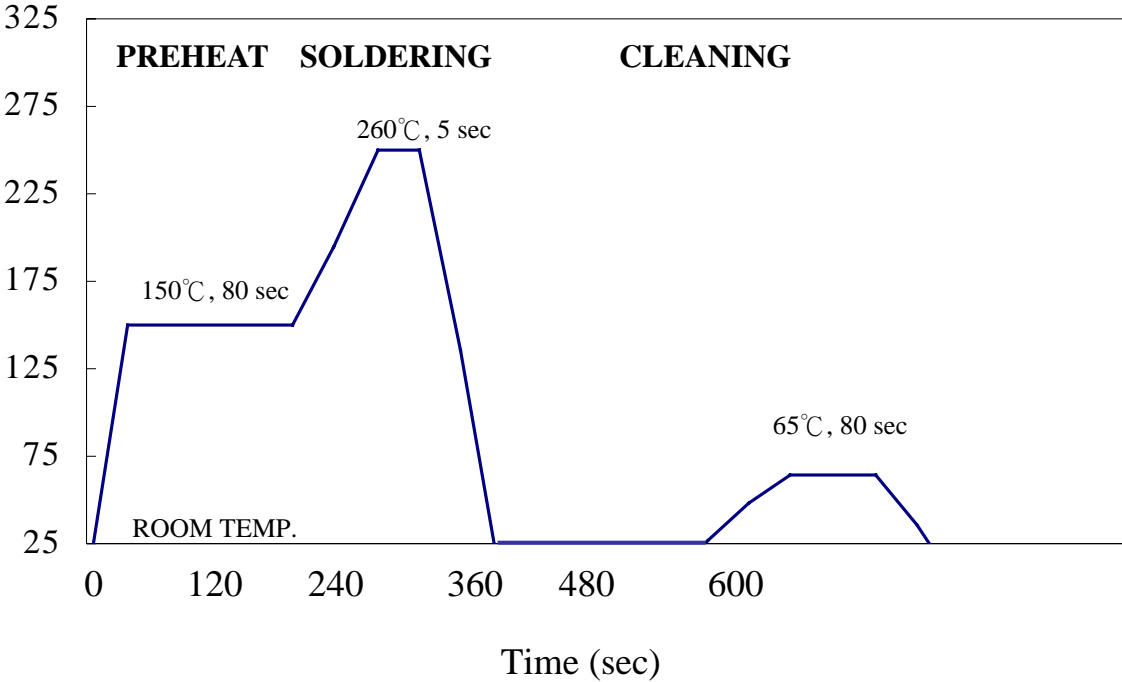
3.3 RATING :  
 ¾ AMP @ 125 VAC  
 ¼ AMP @ 250 VDC ( SHORTING TYPE ONLY )  
 ½ AMP @ 125 VDC ( SHORTING TYPE ONLY )  
 ¼ AMP @ 28 VDC ( SPECIAL RATING)

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.