# mail

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!

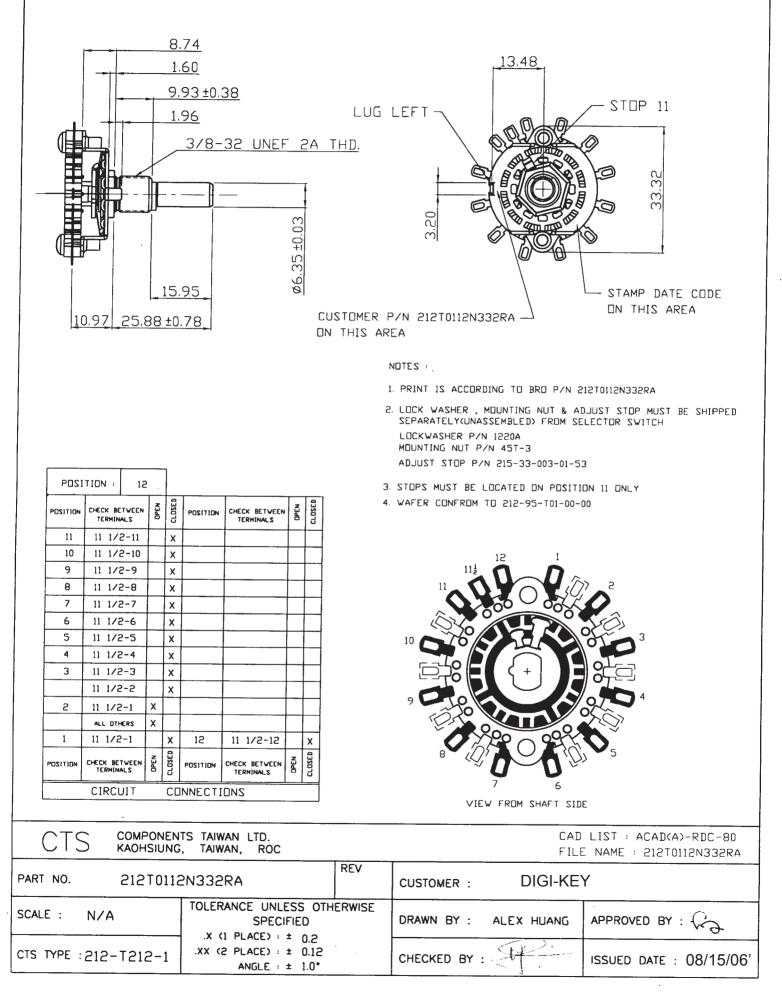


#### Contact us

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UNIT : MM



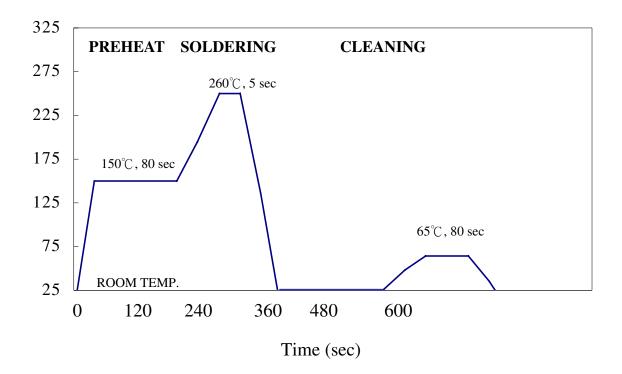
## CTS COMPONENTS TAIWAN, LTD.

		ENGINEERIN	G SPEC	CATION	N	SPEC NO. EN-SPE-212001A						
SPECIE	FICA	TION :				DATE	PAGE OF	JU111				
212 SERIES SELECTOR SWITCH						03-19-02'	1 OF	2				
1.0	0 <u>GE</u>	NERAL :										
	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 <u>MECHANICAL CHARACTERISTICS</u> :												
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											
	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				1				
0		RELEASED	03-19-02	ML								
SYM		REVISION	DATE	BY	SYM	REVISION	DATE	BY				
	WRITTEN BY : S.M.TSAI					CUSTOMER : GENERAL						
REVIEWED BY : H.Y.LIN				DISTRIBUTION :								
APPRO	APPROVED BY : T.J.LEE											

### CTS COMPONENTS TAIWAN, LTD.

		ENGINEERIN	G SPEC	CIFI	CATI	NC		SPEC NO. EN-SPE-212001A				
SPECIFICATION :							DATE	PAGE OF				
212 SERIES SELECTOR SWITCH							03-19-02'	2 OF	2			
3.0 <u>ELECTRICAL CHARACTERISTICS</u> :												
	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 : <sup>3</sup> / <sub>4</sub> AMP @ 125 VAC <sup>1</sup> / <sub>4</sub> AMP @ 250 VDC ( SHORTING TYPE ONLY ) <sup>1</sup> / <sub>2</sub> AMP @ 125 VDC ( SHORTING TYPE ONLY ) <sup>1</sup> / <sub>4</sub> 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 <b>Rohs Compliance</b> : 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.