

Customer: ALPS EUROPE DISTRIBUTION

No. ECR2006-6357

Date: Apr. 20, 2006

Attention:

Your ref. No.: 236.117

Your Part No.: EC11B15244A7

SPECIFICATIONS

ALPS ;

MODEL: EC11B15244A7

Spec. No.:

Sample No.: F 3 0 9 9 7 5 6 M

RECEIPT STATUS

RECEIVED

By Date

Signature

Name

Title

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SPECIFICATIONS

1. THIS SPECIFICATIONS APPLY TO EC11B15244A7 ROTARY ENCODERS.

2. CONTENTS OF THIS SPECIFICATIONS.

F3099756M

3. MARKING

- MARKING ON ALL UNITS
EIA DATE CODE

4. REMARKS

- FURNISH PACKAGE
NUT:1 WASHER:1

• CAUTION

Regardless of the suggested applications of these products being introduced in the specifications, when using them for equipment and devices requiring a high degree of safety, respective manufacturers will please preserve safety of the planned equipment and devices by providing necessary protective circuits and redundancy circuits and reconfirm if safety is being duly preserved.

Products being introduced in the specifications have been designed and manufactured for applications to ordinary electronic equipment and devices such as the AV equipment, electric home appliances, office machines and communications equipment. Consequently, when employing these products for applications requiring a high degree of safety and reliability such as the medical equipment, aviation and aircraft equipment, space equipment and burglar alarm equipment, the using manufacturers will please thoroughly study the proprieties of these products for the planned applications.

Although we are exerting our best efforts to maintain the quality of these products, we cannot guarantee that they will never cause short circuiting and open circuitry. Therefore, when designing an equipment or device with which the priority is given to the safety, you will please carefully study the influences to the whole equipment of a single function failure of Potentiometers and Encoders in advance to make out a fail-safe design providing.

CLASS No.	TITLE
	1.1 11 形回転エンコーダ仕様書 11mm Size Rotary Encoder Specification
7. 組立条件仕様書 Soldering conditions (SW01). (SW02)	
7-1 手付けの組立 Manual soldering	
	<p>温度350°C以下、時間3分以内 Eut. temperature of soldering iron : 350°C or less. Application time of soldering iron : within 3m.</p> <p>7-2 ティップ70μm以下の電極 Dip soldering</p> <p>使用材料 : ①. 6両面銅線 Printed wiring board: Both-sided copper clad laminate board with thickness of 1.6mm. フラックス : 比重0.82以上のフラックスを用いた電極式フラックスにて熱分解禁止、蒸気圧0.9902. FLUX:</p> <ul style="list-style-type: none"> - Specific gravity: 0.82 or more. - Flux shall be applied to the board using a bubble foaming type fluxer. - The board shall be soaked in the flux bubble only to the 2/3 of its thickness. <p>フリート : 蒸気圧0.9902、100°C以下、時間2分以内 Preheating: - Surface temperature of board: 100°C or less. - Preheating time: within 2 min.</p> <p>はんだ : 温度260±5°C、時間5±1秒 Soldering: - Solder temperature: 260±5°C. - Immersion time: 5±1 sec.</p> <p>以上の工程を1回または2回繰り返す。 Apply the above soldering process for 1 or 2 times.</p>
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ALPS ELECTRIC CO., LTD.

SYMB	DATE	APPD.	CHKD.	DSGD.	TITLE	DOCUMENT NO.
					1.1 11 形回転エンコーダ 11mm Size Rotary Encoder	F 3099756M (5/6)
					Y. YOSHIOKA M. SATOH Y. ISAWA	
					Mar. 22, '96 Mar. 22, '96 Mar. 22, '96	

CLASS No.	TITLE	
	プッシュモーメントレススイッチ仕様書 PUSH MOMENTARY SWITCH SPECIFICATION (SW02)	
1. 主要仕様 (主要仕様) D.C. 16V3A (10mA MIN) Switch rating (resistor load)		
2. 電気的仕様 Electrical characteristics		
項目 Item	条件 Conditions	規格 Specifications
2-1 接触抵抗 Contact resistance	D.C. 5V/10mA電圧降下法で測定する。 Measured by the 10mA D.C. voltage drop method.	100mΩ以下 100mA MAX.
2-2 チタリング Chattering	19V/40 (OFF-ON-OFF)1秒で測定する。 Switch is operated at the rate of 1 cycle 1 sec. The 1 cycle shall be OFF-ON-OFF.	10msec以下 Less than 10msec
2-3 絶縁抵抗 Insulation resistance	端子-端子間D.C. 250V/1mAで測定する。 Measurement shall be made under the condition which a voltage of 250V D.C. is applied between individual terminals and bushing.	端子-端子間にて100MΩ以上 Between individual terminals and bushing: 100MΩ MIN.
2-4 絶縁強度 Dielectric strength	端子-端子間E.A.C. 300V/1分間又は、A.C. 360V/2秒間で行う。(リーク電流1mA) A voltage of 300V A.C. shall be applied for 1min or a voltage of 360V A.C. shall be applied for 2sec between individual terminals and bushing. (Leak current: 1mA)	耐電圧、アーク-電圧降下を伴わずに Without damage to parts arising or breakdown.
注記: Note: シェフトはスイッチ端子間には絶縁されていない。 Shaft is insulated from switch terminal.		
3. 機械的仕様 Mechanical characteristics		
項目 Item	条件 Conditions	規格 Specifications
3-1 スイッチ機構-接触部 Contact arrangement		接触部 (Push ON) S. P. S. T. (Push ON)
3-2 スイッチ移動量 Switching stroke		0.5 ± 0.1 mm
3-3 スイッチ作動力 Switch operation force		6±3mN
4. 耐久仕様 Endurance characteristics.		
項目 Item	条件 Conditions	規格 Specifications
4-1 動作寿命 Operating life	動作速度は毎時500回以下で25,000回動作を行う。 此、試験は5,000回中継電圧で行う。 The start of switch shall be 25,000 times at a speed of 500 times per hour without electrical load. After which measurements shall be made. However, an interim measurement shall be made immediately after 5,000 times.	接触抵抗: 200mΩ以下 スイッチ接触抵抗: 200mΩ MAX. Except above items, specifications in clause 2. 2-4, and 3. 1-3 shall be satisfied.

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