1. 一般事項 General

1.1 適用範圍: 此規範適用于電子機器之可變電阻器.

Application: This specification is applied to potentiometers used for electronic equipment.

- 1.2 使用溫度範圍 Operating temperature: -10~+70℃
- 1.3 保存溫度範圍 Storage temperature: -30~+70℃
- 1.4 試驗狀態: 若無特別規定限制,則以溫度5~35℃,相對濕度45~85%,氣壓860~1060mbar之標準狀態測之. 但對此標準狀態之測定值發生判定疑問或有特別要求則以基準狀態(溫度20±2℃,相對濕度

65 ±5%, 氣壓860~1060mbar) 為準測定.

Test conditions : the standard test conditions shall be $5\sim35\,^{\circ}\mathrm{C}$ in temperature , $45\sim85\%\mathrm{RH}$ and $860\sim1060\mathrm{mbar}$ in atmospheric , should any doubt arise in judgement , tests shall be conducted at $20\pm2\,^{\circ}\mathrm{C}$, $65\pm5\%\mathrm{RH}$ and $860\sim1060\mathrm{mbar}$.

2. 構造、尺寸 Construction and dimensions 依組立圖 Refer to attached drawing

3. 電氣性能 Electrical characteristics

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NO.	項	目			試驗條	規	格			
NO.	Ite	em	Test conditions					Specifications		
3–1		抗 值 esistance	把柄置于端子1或3終端, 測定端子1-3間的阻抗值 Measurement shall be made by the resistance between terminal 1 and 3 with lever setted at terminal 1 or 3.				10KΩ±20%			
			端子1和	3間所能	連續負荷之	最大電力		(Audio	track)	
3–2	額定	電力	Power 1	rating is	based on c	ontinuous fi	ıll load	15A taper	: 0.25W	
3-2	Power	rating	operation at the maximum voltage between					(Servo	track)	
			terminal 1 and terminal 3.					15A taper: 0.5W		
3–3		電 壓 voltage	額定電 公稱全 當額定 電壓即 When t	力 P: Pc 阻抗值 R 電壓超定 為額定電 he rated	voltage E ower rating : Nominal t 最高使用電 壓。 voltage exc e, the maxing the rated v	(W) total resistan 医的時候, eeeds the m mum operat	是高使用 aximum			
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100 mm 雙連附馬達滑動式可變電阻器製品規格書

100 mm 2 UNIT WITH MOTOR SLIDE POTENTIOMETERS SPECIFICATIONS

NO.	項目		試驗係	規格			
	Item		Test cond	Specific	ations		
3–4	最高使用電壓 Max operating voltage				150V .	A.C	
	抗阻變化特性 Taper	method .	nt shall be made b	請參照特性的 Resistance			
3–5	_	變化特性	測定位置	<u>V1-2</u>	$\frac{\text{V2-3}}{\text{V1-2}}$		
	D1. A 1: - 41-	taper	test point (mm)	V1-3	V1-3	10.2	50/
		1: Audio track 15A 50 V — 2: Servo track 15A 50 V —		10~2			
	R2: Servo track			V	_	10~2	
			·流電壓,測試1分錯			不可有損傷,電弧,	絕緣,
3–6	耐電壓		端子和外框間			破壞	
	Voltage proof		50V A.C measure		Without damage t	1	
		** *	sition: Between ter	arcing or breakdo	wn.		
	磁切阳片	滑動子置于	移動距離的兩末端				
3-7	殘留阻抗 Residual	間的阻抗值源	則定.	1-2T:10Ω以下(MAX)			
	resistance	The resistance	es at each end of	2-3T: 20Ω以下 (MAX)			
		terminal 1 an	d 2, terminal 2 and				
		施加250V之	上直流電壓,1分鐘往				
3–8	絕緣阻抗 Insulation resistance	測試位置: 🗵	端子和外框 間	100MO 12	+ (MIN)		
3-8		Test voltage	: 250V D.C measu	100MΩ 以上 (MIN)			
		Test position	: Between termina				
		端子1-3間日	P加直流電壓20V(
		印加此額定	電壓),以20mm/秒的	47. 1/10 = 0.44.10			
2 0	滑動雜音	Applying 20V	D.C between the t				
3–9	Slider noise	(When the rat	ed voltage is small	47mV以下 (MAX)			
		it shall be app	olied the rated voltag				
		shall be meas	sured by the specific				
	 導通阻抗	觸控感覺用 之	 之印刷碳膜。(把柄	和T端子間)			
3–10	• =		rack resistance.	ŕ		IKΩ以下 (MAX)	
	resistance	(between leve	er and terminal T)	11775 (1711777)			
		1`	,			<u> </u>	
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4. 機械性能 Mechanical characteristice

NO.	項目	試 驗 條 件	規格		
110.	Item	Test conditions	Specifications		
4–1	把柄移動距離		100±1mm		
	Lever travel				
		移動速度: 20mm/秒			
	動作力	操作位置:把柄前端處	20~130gf		
	Operating force	Traveling speed: 20mm / sec.			
4–2		Operating position: tip of the lever.			
	11 6. 1	移動速度: 20mm/秒	動作力 + 100gf 以下		
	始動力	操作位置:把柄前端處	Operating force + 100gf		
	Starting force	Traveling speed: 20mm / sec.	MAX		
		Operating position: tip of the lever.			
	上上 1 4 4 6	把柄置于兩末端,外框上面起5mm位置施加10Kgf靜負荷	不可產生接觸不良和明		
4–3	把柄止動強度 Lever travel	10秒鐘.	顯之松動 Without excessive paly or poor contact.		
4-3	stop strength	A static load of 10Kgf shall be applied at the point 5mm form top surface of the case for both ends in			
	stop strengtii	the direction of lever travel for 10 sec.			
		固定本體,外框上面起5mm的位置,于把柄移動之垂直			
		方向施加2Kgf靜負荷10秒鐘。	操作部和關連部不可有		
	把柄橫擠壓強度	A static load of 2Kgf shall be applied at the point	變形,破損		
4–4	Side thrust of	5mm form top surface of the case in a direction	Without deformation or		
	the lever	perpendicular to the axial direction for 10 sec. with	breaks in the sliding part and contact part.		
		the potentiometer mounted in assembly conditions.	part and contact part.		
		Personal and the second of the	不可產生破損,滑動不平		
			順,電氣性能需滿足.		
	把柄擠壓引張強	把柄的擠壓方向和引張方向施加5Kgf靜負荷10秒鐘.	Without damage such as		
4–5	度 Thrust and	Thrust and tensile static load of 5Kgf shall be applied	bed sliding and breaking		
	tensile lever	to the potentiometer in the lever direction for 10 sec.	or play in the lever.		
			Electrical characteristics		
			shall be satisfied.		
		在把柄移動方向的垂直方向施加250gf-cm,在把柄的前	2 (2 v. I. /20)		
	把柄横振幅	端測定.	2 (2×L/20) mm p-p 以下 L=把柄長度		
4–6	Displacement of	A torsion mornent of 250gf-cm shall be applied at the	2 (2×L/20) mm p-p MAX		
	lever	lever in a direction perpendicular to the axial direction	L = Length of lever		
		and then the displacement shall be measured.	-		

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NO.	項目	試 驗 條 件	規格		
110.	Item	Test conditions	Specifications		
	把柄之傾斜及	44	θ:2°以下,扭轉後需回		
	扭曲		復原來位置		
4–7	Lever inclination		θ : 2° MAX		
	and torsion		Return to the same		
			position after torsion.		
		相對于螺絲孔中心, 測定把柄的中心到螺絲孔中心的距離			
		After sliding lever as far as it will go in each direction,			
4–8	把 柄 偏 心 Lever deviation	the distance from the center of the lever to the middle	單側0.5mm 以下		
	Ector deviation	of the mounting screw hole shall be measured at the	0.5mm MAX on each end		
		both ends.			
			全阻抗值變化在初期的±5%以內,		
		在300±5℃,3±0.5秒或260±5℃,5±0.5秒後於常温常濕中	端子不可有接觸不良或明顯松動		
	焊錫耐熱	放1小時後測定。	Change in total resistance is		
4–9	Resistance	At 300 ± 5 °C for 3 ± 0.5 sec or 260 ± 5 °C for 5 ± 0.5 sec. Then the	relative to the value before test \pm		
	tosoldering heat	potentiometer shall be maintained atstandard at mospheric for	5% .		
		1 hour after which measurement shall be made.	Without excessive looseness of		
			terminals and failure contact.		

5. 耐久性能 Endurance											
NO.	項	目			試驗係	€ 件		規	格		
110.	Ite	em			Test cond	Specifications					
			無負荷出	犬態, 把柄	滑動速度600	1. 全阻抗值的變化為初期					
			離的90%	6以上,總三	欠數50,000回.	以上.		值±15%以內.			
			The mo	ving conta	act, without e	electrical load	, shall be	2. 滑動雜音: 150m	iV 以下		
			slided fo	orm one	end stop to the	he other end	returned	3.殘留阻抗:1-2T	: 30Ω以下		
			to its or	riginal pos	sition extend	2-3T	: 50Ω以下				
			effective	distance		4. 其它需滿足(3項) (4項)					
5–1			Slide sp	eed: 600	cycle / hour.	1. Change in total resistance					
3-1			Total cy	cles: 50,0	000 cycles.	is relative to the value					
	滑動	壽命				before test $\pm 15\%$.					
	Slidin	g life				2. Noise: 150mV MAX					
								3.Residual resistance:			
						$1-2T : 30\Omega MAX.$					
						2-3T : 50ΩMAX.					
								4. Clause (3) (4) sl	nall be satisfied.		
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NO.	項目	試 驗 條 件	規 格		
1,00	Item	Test conditions	Specifications		
6–1	額定電壓 Rated voltage	馬達端子間。 Between terminals of the motor.	10V D.C.		
6–2	使用電壓範圍 Operating supply voltage range		6∼11V D.C.		
6–3	起動電流 Starting current	輸入電壓D.C.10V Supply voltage 10V D.C.	800mA以下 (MAX)		
6–4	起動動作力 Starting force	輸入電壓D.C.10V,測試位置在把柄前端處。 Supply voltage 10V D.C. It shall be measured at the top of lever.	20gf以上 (MIN)		
6–5	把柄移動速度 Moving speed oflever	輸入電壓D.C.10V Supply voltage 10V D.C.	20mm/0.1sec以上 (MIN)		
6–6	最大電流 Maximum current	把柄固定時,輸入額定電壓。 Lock the shaft of the motor and the rated voltage shall be applied to the motor.	400∼800mA		

RoHS Compliance

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