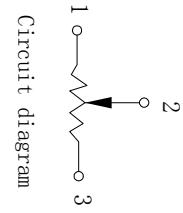
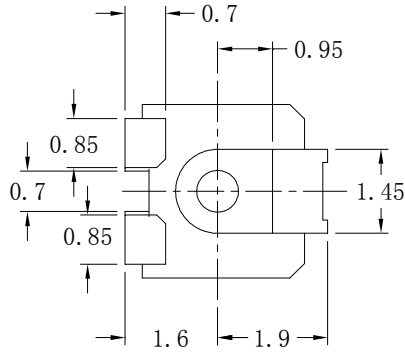
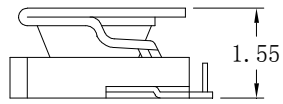
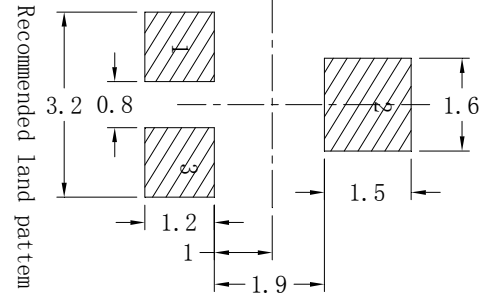
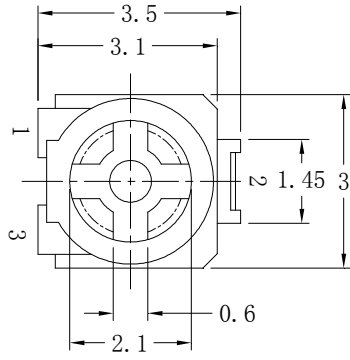


1. STYLE

2. EXTERNAL DIMENSIONS



No Indication Tolerance	
Less than 10	±0.3
above 10--30	±0.5
above 30--100	±1.0
angular dimension	±5°

5			Projection		Unit	mm	File name	
4			Drawn by	Checked by	Approved by		Article No.	
3			chen.				Designed No.	Scale
2								
1								
No.	Description	Date	Apr.28th,2006					



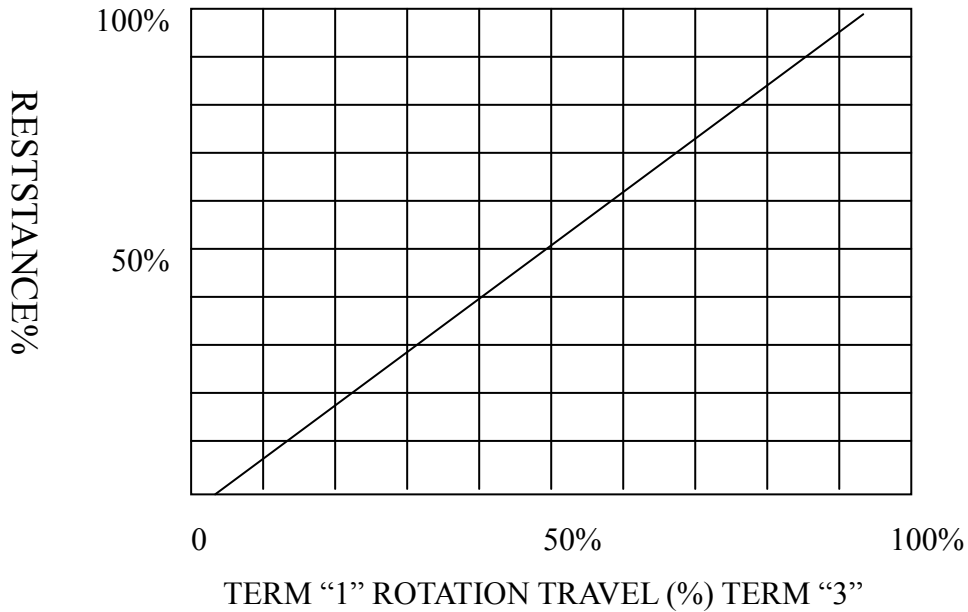
C3305

Drawing-Number	Edition	Sheet
DN2006042801		/

**3mm SMD Series**

- ◆ TOTAL RESISTANCE ..... 100Ω~1MΩ
- ◆ TOTAL RESISTANCE TOLERANCE..... ±25%
- ◆ RESISANCE TAPER ..... .B TYPE LIN
- ◆ MAX. OPERATION VOLTAGE ..... LINEAR TAPER AC 50V
- ◆ RATED POWER ..... LINEAR TAPER 0.1W
- ◆ RESIDRAL RESISTANCE ..... TERM. 1~2: LESS THAN 20Ω  
 TERM. 2~3: LESS THAN 20Ω  
 ≥1KΩ1%
- ◆ TOTAL ROTATIONAL ANGLE ..... 360° VALID 220° ±20°
- ◆ ROTATIONAL TORQUE ..... 20gf.cm ~ 200gf.cm
- ◆ ROTATIONAL STOPPER STRENGTH ..... 0.5kgf.cm MAX.
- ◆ PUSH-PULL STRENGTH ..... 0.5kgf MAX
- ◆ ROTATIONAL LIFE ..... >20 CYCLES
- ◆ OPERATION LIFE ..... >20 CYCLES  
 RESISTANCE VALUE ±10%

**TAPERS B SERIES**



# 3mm SMD Electrical characteristics

# 電氣性能

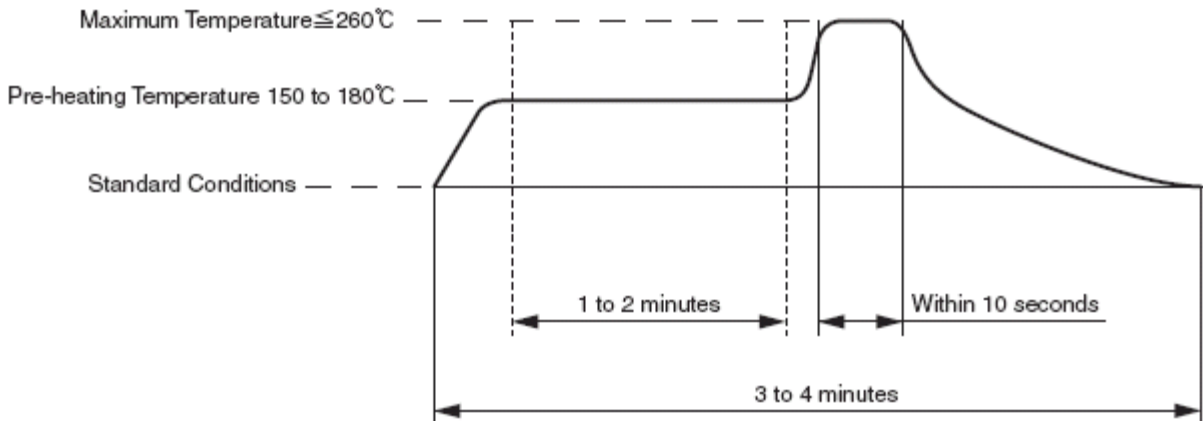
Total resistance 總阻值	B taper 100Ω ~ 1MΩ (Lin)
Total resistance tolerance 總阻值容許差	± 25%
Rated power 定格電力	0.1W/70°C 0W/125°C
Temperature range 環境溫度範圍	- 55°C ~ 125°C (附圖一) Rated power % <p style="text-align: center;">周圍溫度 (°C)</p>
Max. Operating Voltage 最高耐電壓	50V A C $E: \sqrt{P \cdot R}$ E: Operating voltage P: Rated power R: Total resistance
Residual Resistance 殘留阻值	Term 1~2 : Less than 20Ω ≥1KΩ1% Term 2~3 : Less than 20Ω ≥1KΩ1%
Rotational noise 轉動噪音	150mv max.
Resistance temperature coefficient 電阻溫度係數	200ppm/°C

### 3mm SMD 電氣性能 Electrical Characteristics

序號 NO	項目 ITEM	測試條件 TEST CONDITION	規格 SPECIFICATIONS
1.1	絕緣阻抗 Insulation resistance	以 DC ***V 之電壓，測試 1 分鐘測試位置端子與主軸 Test voltage: DC***V Test position: Between terminals and the shaft for 1minute ± 5 seconds.	!
1.2	耐壓電 Withstand voltage	以 AC ***V(50~60Hz2mA)壓電，測試 1 分鐘測試位置端子與主軸 Test voltage: AC ***V (50~60Hz2mA)，measured for 1minute Test position: Between terminals and the shaft 1 minute ± 5	!

### 機械性能 Mechanical Characteristics

序號 NO	項目 ITEM	測試條件 TEST CONDITION	規格 SPECIFICATIONS
2.1	操作力矩 Operating torque	-55°C~125°C	20~200gf.cm
2.2	止擋強度 Shaft stopper strength	將主軸轉到起點或終點處，施力力矩 0kgf.cm(0.8N.m)，保持 15 秒鐘 The shaft shall be rotated to one end or the other end with pull torque kgf.cm(0N.m) for 15 seconds	!! 360°
2.3	端子強度 Strength of terminals	於端子尖端各方向施加 500gf(5N)之力，保持 1 秒鐘 When 500gf(5N) are weighted on top of terminal in every direction for minute	!!
2.4	焊接性能 Solder ability	焊接溫度 Soldering temperature: 230±5°C 浸漬時間 Dipping time: 3±0.5 seconds	除切割面外，75%以上浸焊部位被焊料覆蓋 More than 75% of the dipping part shall be covered by solder，excluding the cutting surface
2.5	耐焊接	260°C+_5°C 10 seconds MAX	無端子鬆動損壞，端子基板破裂等 Loose stale of terminal and damage on stator board should not exist



### 3mm SMD 耐候性 Weather Performance

序號 NO	項目 ITEM	測試條件 TEST CONDITION	規格 SPECIFICATIONS
3.1	耐濕度 Humidity Test	置於溫度 $40\pm 2^{\circ}\text{C}$ ，溼度 90~95%RH，500 小時後，放於正常環境下 1 小時，然後 1 小時內測試 Testing switch being kept in the conditions at $40\pm 2^{\circ}\text{C}$ and 90~95%RH for 500 hours in a normal ambient condition for 1 hour. Then to be measured within 1 hour.	絕緣電阻在!!!以上， 500V DC，耐壓 AC500V 持續 1 分鐘操 作力舉變化在 30%之 內各部位無損壞，無機 械性能異常電阻值變 化 $\pm 10\%$ 以內 Insulation resistance: more than !!! $\Omega$ for 500VDC Withstand voltage: 500Vac for 1 minute Operating torque: within $\pm 30\%$ of initial value Every parts should not defected in appearance and mechanical performance. Resistance < $\pm 10\%$
3.2	耐熱性 Heat Test	置於溫度 $125\pm 2^{\circ}\text{C}$ ，500 小時後，放於正常環境下 1 小時，然後在 1 小時內測試 Testing switch being kept in the conditions at $125\pm 2^{\circ}\text{C}$ in temperature for 500 hours in a normal ambient condition for an hour. The to be measured within hour.	
3.3	低溫特性 Cold Test	置於溫度 $-55\pm 2^{\circ}\text{C}$ ，500 小時後，放於正常環境下 1 小時，然後在 1 小時內測試 Testing switch should be kept in the condition in the temperature of $-55\pm 2^{\circ}\text{C}$ for 500 hours in a normal ambient condition for an hour. Then be measured within an hour.	

## 耐久性 Durability

序號 NO	項目 ITEM	測試條件 TEST CONDITION	規格 SPECIFICATIONS
4.1	壽命(無負荷) Life Test (Without Load) performance. Resistance < ±10%	無負荷狀態連續測試，速度為 6~10 回/分，總次數為 20 次 20cycles of operation shall be performed continuously at the rate of 6 ~10 cycles/minute without load.	絕緣電阻在!!!Ω 以上，***VDC，耐壓 AC***V 持續 1 分鐘，操作力矩變化在 30%之內各部無損壞，無機械性能異常 Insulation resistance: more than !!!Ω for ***VDC. Withstand voltage: ***VAC for 1 minute Operating torque: within±30% of initial value Every parts should not defected in appearance and mechanical performance