

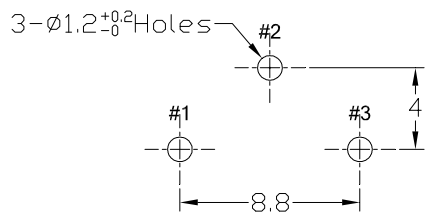
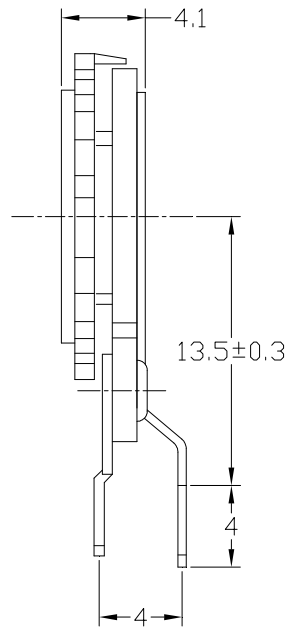
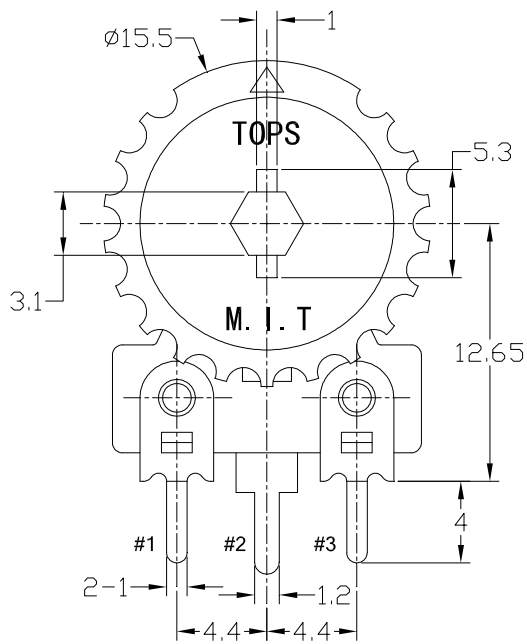
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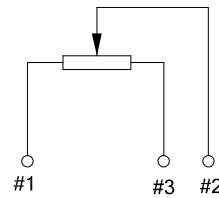
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Jameco Part Number 94722



Mounting Hole Details



Circuit

| | |
|-------------------------|---------------|
| NO INDICATION TOLERANCE | |
| LESS THAN 10 | ± 0.3 |
| ABOVE 10 TO 30 | ± 0.5 |
| ABOVE 30 TO 100 | ± 1 |
| ANGULAR DIMENSION | $\pm 5^\circ$ |

| | | | | | | | | |
|--|--|--|--------------|------------|-------------|----|--------------|-------|
| | | | PROJ. ANGLE | | UNIT | MM | FILE NAME | |
| | | | DRAWN BY | CHECKED BY | APPROVED BY | | ARTICLE NO. | |
| | | | WUZHENGWEI | | | | DESIGNED NO. | SCALE |
| | | | 2006. 11. 28 | | | | | |

CIC® **CIC COMPONENTS IND CO., LTD.**
 2F, No.3, Lane 130, Min-Chung Road, Hsin-Tien City
 Taipei Hsien, Taiwan, R.O.C.

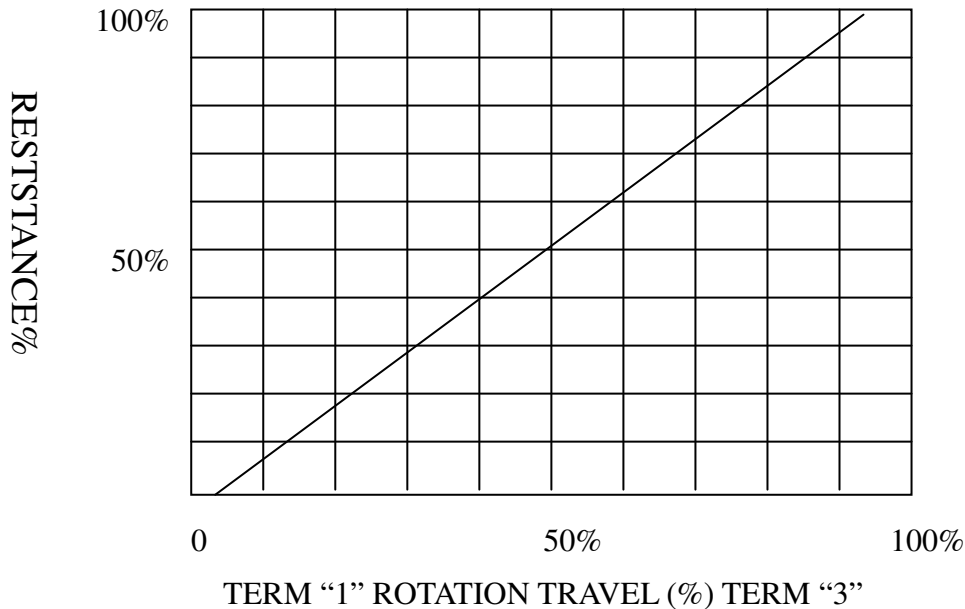
158-36-8840

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| DRAWING NO. | EDITION | SHEET |
| DN2006112811 | | / |

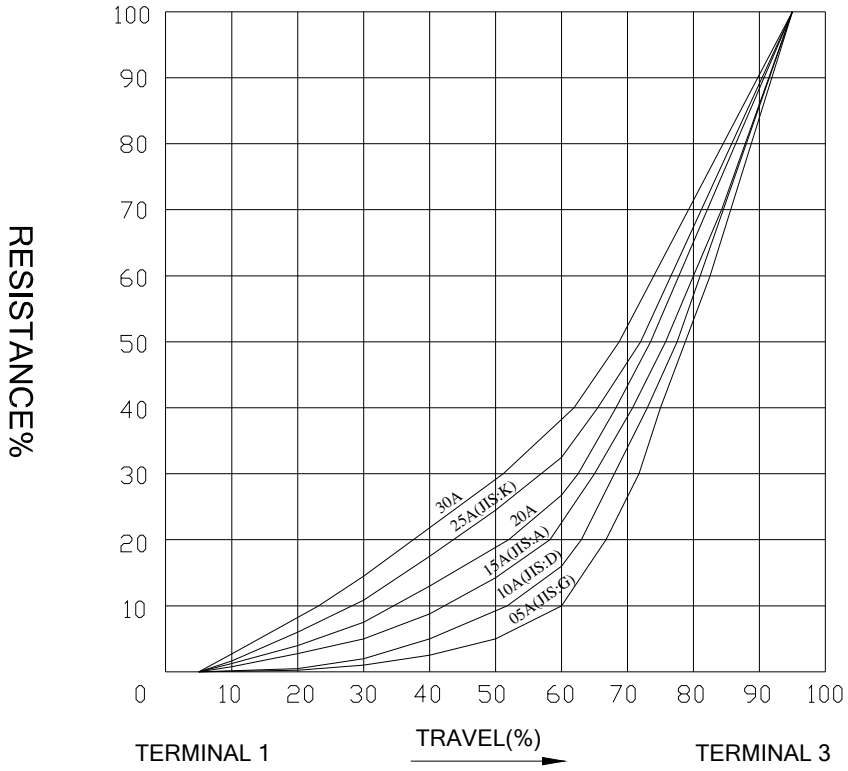
15 ϕ Series

- ◆ TOTL RESISTANCE 100 Ω ~5M Ω
- ◆ TOTL RESISTANCE TOLERANCE..... $\pm 20\%$
- ◆ $\leq 500 \Omega$ or $\geq 500K \Omega$ $\pm 30\%$
- ◆ RESISANCE TAPER A.B.C
- ◆ MAX. OPERATION VOLTAGE LINEAR TAPER AC 250V
- ◆ RATED POWER LINEAR TAPER 0.25W
- ◆ OTHER TAPER G:0.125W
- ◆ INSRLATION RESISANCE MORE THAN 100M Ω AT DC 500V
- ◆ WITHSTAND VOLTAGE 1 MINUTE AT AC 500V
- ◆ RESIDRAL RESISTANCE TERM. 1~2: LESS THAN 10 Ω or $< 1\%$
 TERM. 1~3: LESS THAN 10 Ω or $< 1\%$
- ◆ TOTAL ROTATIONAL ANGLE 270° $\pm 20^\circ$
- ◆ ROTATIONAL TORQUE 20gf.cm ~ 250gf.cm
- ◆ ROTATIONAL STOPPER STRENGTH > 10Num (14 OZ/IN).
- ◆ PUSH-PULL STRENGTH > 25N (90 OZ)
- ◆ ROTATIONAL LIFE 500 CYCLES
- ◆ OPERATION LIFE 1,000 CYCLES
 RESISTANCE VALUE $\pm 20\%$

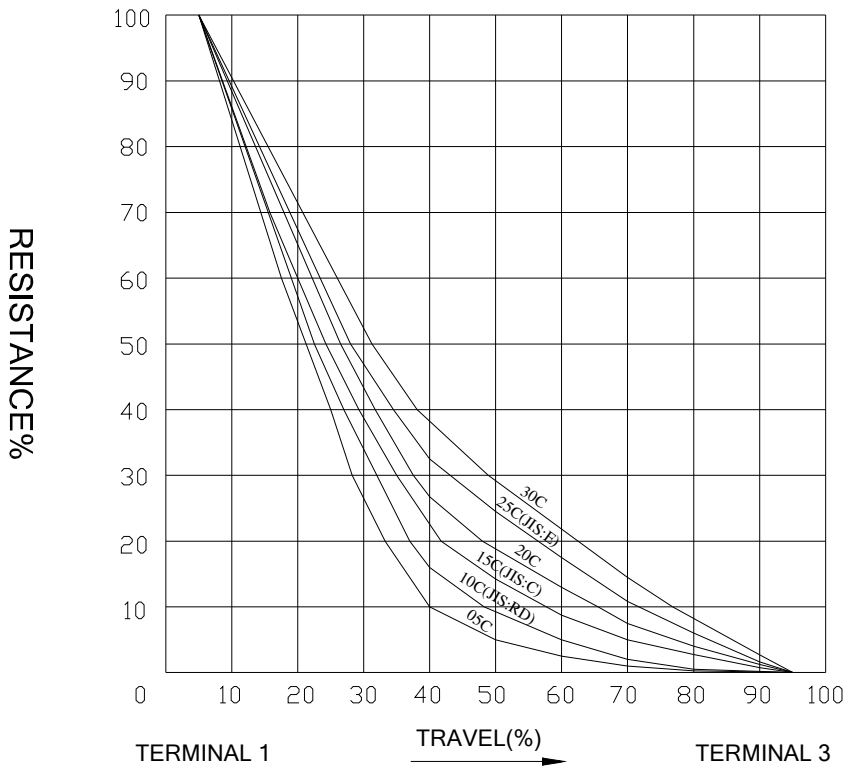
TAPERS B SERIES



TAPERS A SERIES



TAPERS C SERIES



15 § Electrical characteristics

電氣性能

| | |
|--|--|
| Total resistance 總阻值 | B taper $100\Omega \sim 5M\Omega$ (Lin) A, C taper $1K \sim 1M\Omega$ (Log, Alog) |
| Total resistance tolerance 總阻值容許差 | $\pm 20\%$ $\leq 500\Omega$ or $\geq 500K\Omega \pm 30\%$ |
| Rated power 定格電力 | $0.25W/40^\circ C$ $0W/70^\circ C$ |
| Temperature range 環境溫度範圍 | $-25^\circ C \sim 70^\circ C$ (附圖一) Rated power % <p style="text-align: center;">周圍溫度 (°C)</p> |
| Max. Operating Voltage 最高耐電壓 | $250V$ 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 10Ω or $<1\%$ Term 2~3 : Less than 10Ω or $<1\%$ |
| Rotational noise 轉動噪音 | $150mv$ max. |
| Resistance temperature coefficient 電阻溫度係數 | $850ppm/^\circ C$ |

15 § 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 500V 之電壓，測試 1 分鐘測試位置端子與主軸 Test voltage: DC 500V Test position: Between terminals and the shaft for 1minute ± 5 seconds. | 100MΩ min |
| 1.2 | 耐壓電 Withstand voltage | 以 AC 500V(50~60Hz2mA)壓電，測試 1 分鐘測試位置端子與主軸 Test voltage: AC 500V (50~60Hz2mA)，measured for 1minute Test position: Between terminals and the shaft 1 minute ± 5 | 不可有絕緣破壞 No dielectric breakdown shall be occurred |

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 | -25°C~70°C | 20~250gf.cm |
| 2.2 | 止擋強度 Shaft stopper strength | 將主軸轉到起點或終點處，施加力矩 1kgf.cm(10N.m)，保持 15 秒鐘 The shaft shall be rotated to one end or the other end with pull torque kgf.cm(10N.m) for 15 seconds | 操作部和關連部不有變形破損 Without deformation or breads in the operating part and contact part |
| 2.3 | 端子強度 Strength of terminal | 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 | 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 |
| 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 | 270°C 3±1 seconds | 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 |

15 § 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 $10\text{M}\Omega$ 以上，500V DC，耐壓 AC500V 持續 1 分鐘操作力矩變化在 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 $10\text{M}\Omega$ 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 $70\pm 2^{\circ}\text{C}$ ，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 $70\pm 2^{\circ}\text{C}$ 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 $-25\pm 2^{\circ}\text{C}$ ，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 $-25\pm 2^{\circ}\text{C}$ 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 $< \pm 2.0\%$ | 無負荷狀態連續測試，速度為 6~10 回/分，總次數為 500 次 500cycles of operation shall be performed continuously at the rate of 6 ~ 10 cycles/minute without load. | 絕緣電阻在 $10\text{M}\Omega$ 以上，500VDC，耐壓 AC500V 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 $10\text{M}\Omega$ 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 |