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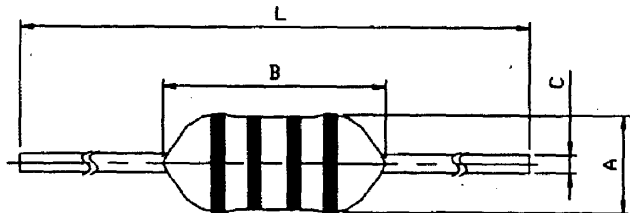
www.Jameco.com ♦ 1-800-831-4242

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SPECIFICATION

| |
|------|
| TYPE |
| CEC |

1. DIMENSION (UNIT: mm)



COLOR RING 1 2 3 4

| | |
|---|---|
| A | MAX. $\phi 3.2$ |
| B | MAX. 7.0 |
| C | $\phi 0.50 \pm 0.05$ (0.1~18 μ H) $\phi 0.48 \pm 0.05$ (22~1000 μ H) |
| L | 63 ± 3 |

* THE LENGTH OF THE TERMINAL PINS DOES NOT INCLUDE SOLDER TIP.

2. CIRCUIT

Jameco Part Number 208194



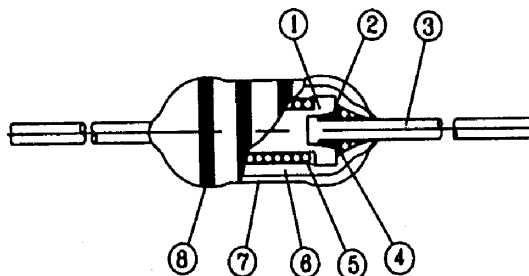
3. MARKING

| COLOR | FIRST FIGURE 1 | SECOND FIGURE 2 | MULTIPLIER 3 | TOLERANCE 4 |
|--------|-------------------|--------------------|-----------------|----------------|
| BLACK | 0 | 0 | 1 | $\pm 20\%$ |
| BROWN | 1 | 1 | 10 | - |
| RED | 2 | 2 | 100 | - |
| ORANGE | 3 | 3 | 1000 | - |
| YELLOW | 4 | 4 | - | - |
| GREEN | 5 | 5 | - | - |
| BLUE | 6 | 6 | - | - |
| VIOLET | 7 | 7 | - | - |
| GRAY | 8 | 8 | - | - |
| WHITE | 9 | 9 | - | - |
| GOLD | - | - | 0.1 | $\pm 5\%$ |
| SILVER | - | - | 0.01 | $\pm 10\%$ |

TYPE

CEC

4. CONSTRUCTION:




| No. | NAME | MATERIAL | MANUFACTURER |
|-----|------------------------|--|---|
| 1 | CORE | FERRITE CORE CM11, CM9D, CL9H OR EQUIVALENT | TONICHI FERRITE PRODUCTS CO., LTD. etc. |
| 2 | ADHESIVE | EPOXY RESIN | GUANG ZHOU WELLS CHEMICAL CO., LTD. etc. |
| 3 | LEAD WIRE | SOLDER PLATED COPPER WIRE | WELL FORE SPECIAL WIRE CORPORATION |
| 4 | SOLDER | H60A | ALPHA METALS LTD. etc. |
| 5 | WIRE | POLYURETHANE ENAMELLED COPPER WIRE | RIKEN ELECTRIC WIRE CO., LTD. etc. JENLEY ENTERPRISES LTD. JUNG SHING WIRE CO., LTD. |
| 6 | UNDER-COATING RESIN | BUTADIENE RESIN | HOMETOWN INDUSTRIAL CO., LTD. etc. |
| 7 | OVER-COATING RESIN | EPOXY RESIN | HOMETOWN INDUSTRIAL CO., LTD. etc. |
| 8 | COLOR CODE | MELAMINE RESIN | HOMETOWN INDUSTRIAL CO., LTD. etc. |

5. GENERAL CHARACTERISTICS

* STANDARD TESTING CONDITIONS:

UNLESS OTHERWISE SPECIFIED, THE STANDARD RANGE OF ATMOSPHERIC CONDITIONS FOR MEASUREMENTS AND TESTS ARE AS FOLLOWS: AMBIENT TEMPERATURE: 15°C~35°C. RELATIVE HUMIDITY : 25% ~85%. AIR PRESSURE : 86kPa ~106kPa.

IF THERE IS ANY DOUBT ABOUT THE RESULTS, MEASUREMENT SHALL BE MADE WITHIN THE FOLLOWING LIMITS: AMBIENT TEMPERATURE: 20°C±1°C. RELATIVE HUMIDITY : 63% ~67%. AIR PRESSURE : 86kPa ~106kPa.

| No. | ITEMS | | TEST CONDITIONS | SPECIFICATION |
|-----|--|---------|--|---|
| 1 | OPERATION TEMPERATURE STORAGE TEMPERATURE | | | -25 ~ +85℃ (INCLUDING COIL TEMPERATURE RISE) -40 ~ +85℃ |
| 2 | LEAD TERMINAL STRENGTH | PULLING | A STATIC PULLING FORCE OF 25N IN A DIRECTION PARALLEL TO THE LEAD TERMINALS FOR 5±1 SECONDS. | NO TERMINAL BREAKAGE OR LOOSENING |
| | | BENDING | LOAD WITH 3.0N AND 90° BENDING AND STRAIGHTENING TWICE IN TWO DIRECTIONS (UPWARD & DOWNWARD) | |
| 3 | DIELECTRIC WITHSTAND VOLTAGE TEST | | D.C.500V APPLIED BETWEEN WINDING-BODY FOR 1 MINUTE. | NO DIELECTRIC DAMAGE |
| 4 | INSULATION RESISTANCE TEST | | D.C.500V APPLIED BETWEEN WINDING-BODY FOR 1 MINUTE. | OVER 100 MΩ |
| 5 | OVER CURRENT TEST | | INPUT 2 TIMES OF RATED INTO THE SAMPLE FOR 5 MINUTES. | NO FIRE OR ANY ABNORMALITY |
| 6 | RESISTANCE TO SOLDERING HEAT TEST | | FIX THE SAMPLES ON A 1.6MM THICKNESS PCB, THEN DIP THE SAMPLE LEADS UP TO THE PCB INTO A SOLDERING BATH OF 260±5℃ FOR 5±1 SECONDS. | NO MECHANICAL BREAKAGE. DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±3.0% QU: WITHIN ±20% |
| 7 | SOLDER ABILITY TEST | | IMMERSE THE TERMINAL IN FLUX FOR 5 SECONDS. THEN DIP THE TERMINAL INTO A SOLDERING BATH OF 235±5℃ FOR 2±0.5 SECONDS. | OVER 90% OF THE SURFACE BEING IMMERSED SHALL BE COVERED WITH NEW SOLDER UNIFORMLY. |
| 8 | VIBRATION TEST | | AMPLITUDE: 1.5MM P-P FREQUENCY:10~55~10HZ (1 MINUTE PER CYCLE) DURATION: 2 HOURS IN EACH OF X.Y.Z AXIS. (TOTAL 6 HOURS) | DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±1.0% QU: WITHIN ±20% |
| 9 | SHOCK TEST | | PEAK ACCELERATION: 981M/S ² DURATION OF PULSE: 10MS SHOCK TIMES: 3 TIMES IN EACH OF X, Y, Z AXIS. (TOTAL 9 TIMES) | DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±1.0% QU: WITHIN ±20% |
| 10 | HUMIDITY TEST | | TEMPERATURE: 40℃±2℃ HUMIDITY: 90%~95%RH DURATION: 500±12 HOURS. | DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±10% QU: WITHIN ±20% |
| 11 | DRY HEAT TEST | | TEMPERATURE: 85℃±2℃ DURATION: 500±12 HOURS. | |
| 12 | COLD TEST | | TEMPERATURE: -25℃±3℃ DURATION: 500±12 HOURS. | |
| 13 | DRY HEAT WITH LOAD | | TEMPERATURE: 85℃±2℃ LOAD CONDITION: RATED CURRENT DURATION: 500±12 HOURS. | |
| 14 | DAMP HEAT WITH LOAD | | TEMPERATURE: 40℃±2℃ HUMIDITY: 90%~95%RH  LOAD CONDITION: RATED CURRENT DURATION: 500±12 HOURS. | |
| 15 | THERMAL SHOCK | | 5 CONTINUOUS CYCLES SHOWN AS BELOW | |
| | | | TEMPERATURE | DURATION |
| | | | -25℃±3℃ | 30 MINUTES |
| | | | 85℃±3℃ | 30 MINUTES |

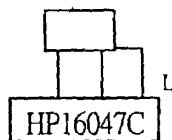
ELECTRICAL CHARACTERISTIC INSPECTION REPORT

電氣性能測試報告(五)

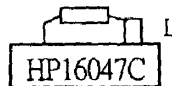
2002年6月3

| CUSTOMER 菁盛 (R4005) (客戶名稱): | | | | | PART NO: CEC-101J SPEC. NO. H500-0011 | |
|--------------------------------|--------------|---------|-----------|------------------|--|-----------------------|
| ITEM (項目) | L (μ H) | Q | SRF (MHz) | Rdc (Ω) | RATED CURRENT (A) | |
| | | | | | I _{dc} (Δ L/L:-10%) | I (Δ T=20 °C) |
| SPEC. (規格) | 100 \pm 5% | 45 Min. | 5.0 Min. | 4.98 Max. | 0.24 Max. | 0.11 Max. |
| 1 | 103.2 | 67 | 6.90 | 4.14 | 0.29 | 0.15 |
| 2 | 101.9 | 67 | 7.08 | 4.28 | 0.32 | |
| 3 | 103.3 | 61 | 6.67 | 4.26 | 0.29 | |
| 4 | 98.7 | 72 | 7.53 | 4.23 | 0.32 | |
| 5 | 101.4 | 69 | 7.09 | 4.22 | 0.29 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Max. | 103.3 | 72 | 7.53 | 4.28 | 0.32 | |
| Min. | 98.7 | 61 | 6.67 | 4.14 | 0.29 | |
| R | 4.6 | 11 | 0.86 | 0.14 | 0.03 | |
| \bar{X} | 101.70 | 67.2 | 7.054 | 4.226 | 0.302 | |
| TESTING FREQUENCY (測試頻率) | 2.52MHz/1V | | | | | |

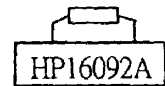
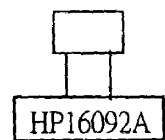
TESTING DIAGRAM (測試示意圖):



L=3/5/10(mm)



L=10(mm)



TESTING INSTRUMENT (測試儀器):

- | | | | |
|--------------------------|---|-------------------------|---|
| 1. Q METER | <input type="checkbox"/> MQ-1601 | 7. IMPEDANCE ANALYZER | <input type="checkbox"/> HP-4191A |
| 2. L.C.R. METER | <input type="checkbox"/> LCR-745 | | <input type="checkbox"/> HP-4291B |
| | <input checked="" type="checkbox"/> HP-4284A | | <input type="checkbox"/> HP-4395A |
| | <input checked="" type="checkbox"/> HP-4285A | | <input type="checkbox"/> HP-4294A |
| | <input type="checkbox"/> HP-4262A | 8. BIAS CURRENT SOURCE | <input checked="" type="checkbox"/> HP-42841A |
| 3. L.C.Z. METER | <input type="checkbox"/> HP-4277A | 9. MICRO-OHM METER | <input type="checkbox"/> KEITHLEY 580 |
| 4. MULTIMETER | <input checked="" type="checkbox"/> HP-34401A | | <input checked="" type="checkbox"/> HP-34420A |
| 5. DC POWER SUPPLY METER | <input checked="" type="checkbox"/> HP-E3632A | 10. NETWORK ANALYZER | <input type="checkbox"/> HP-8753C |
| 6. THEROMETER | <input type="checkbox"/> TES1310 | 11. DIELECTRIC ANALYZER | <input type="checkbox"/> DU-332 |

TESTING CONDITION (測試條件):

TEMPERATURE (溫度): 20 °C

HUMIDITY (濕度): 65 %

| APPROVED | CHECKED | TESTED |
|----------|---------|--------|
| | | |