

S P E C I F I C A T I O N

APPLICATION FOR APPROVAL OF

- ITEM : RADIAL INDUCTOR ■
- DESCRIPTION : DR 6.5 X 7.5mm ■
- CODE NO : DR2) 150uH(BULK & TAPPING) ■
- MODEL NO : ■

This space is used for customer's approval

■ DATE : 2008. 07. 23. ■

| | |
|----------------------------|-----------------------|
| DRAWN BY M . Y . JEON | DATA 2008. 07. 23. |
| CHECKED BY | DATA |
| APPROVED BY J . G . KIM | DATA 2008. 07. 23. |

CUSTOMER :

| SPECIFICATION | | SHEET NO. | 1 OF 10 | | | |
|---|-----------------|-------------|----------------|-------|---------|----------|
| | | DATA | 2008. 07. 23. | | | |
| PART NAME | RADIAL INDUCTOR | MODEL NAME | | | | |
| PART NO. | DR2-150uH-T.B | DESCRIPTION | DR 6.5 X 7.5mm | | | |
| <p>1. GENERAL SPECIFICATION</p> <p>1) SCOPE</p> <p>This specification applies to part number <u>150uH</u> RADIAL INDUCTOR (or PEAKING COIL) for use in electronic appliances which is supplied for</p> <p>2. MECHANICAL CHARACTERISTIC</p> <p>PEAKING COIL shall conform in size, dimension, and other mechanical properties, to the part drawing attached here to.</p> <p>1) Marking</p> <p>PEAKING COIL shall be permanently and legibly marked with the part number on the specification position.</p> <p>2) Terminal strength</p> <p>Terminal shall withstand for <u>30</u> seconds without breakdown on losing when a static load of <u>2</u> Kg is applied in the drawing direction to the terminal at the point where the external load.</p> <p>3. ENVIRONMENTAL & LIFE CHARACTERISTIC</p> <p>1) Temperature rise</p> <p>Temperature rise of the each winding and core shall be less than <u>ambient + 65°C</u> , when the PEAKING COIL continuously operated at full load(test load) until constant temperature is attained.</p> <p>2) Heat-resistance</p> <p>Immediately after PEAKING COIL being placed in room for <u>96</u> Hours maintained AT <u>105°C ± 2°C</u> ambient temperature, the PEAKING COIL shall conform with the above part paragraph (4) and also insulation resistance shall be more than <u>100</u> MΩ.</p> <p>3) Moisture resistance</p> <p>Immediately after PEAKING COIL being placed in room for <u>120</u> Hours in such humidity chamber this is maintained at <u>90 - 95%</u> relative humidity and <u>55°C ± 2°C</u> temperature and wiped a drop of water, PEAKING COIL shall conform with the above paragraph(4) and also insulation shall be the <u>10</u> MΩ.</p> <p>4) Safety consideration</p> <p>PEAKING COIL shall meet all the requirements subject to <u>IEC-950</u> standards for safety of information technology equipment including electrical business equipment.</p> <p>5) Solderability</p> <p>Dip pads in RMA flux, 96.5/0.5/3 solder (Sn/Cu/Ag)at 260°C for 5±2 seconds</p> | | | | | | |
| NO | REVISION | DATE | CHECK | DRAWN | CHECKED | APPROVED |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

CUSTOMER :

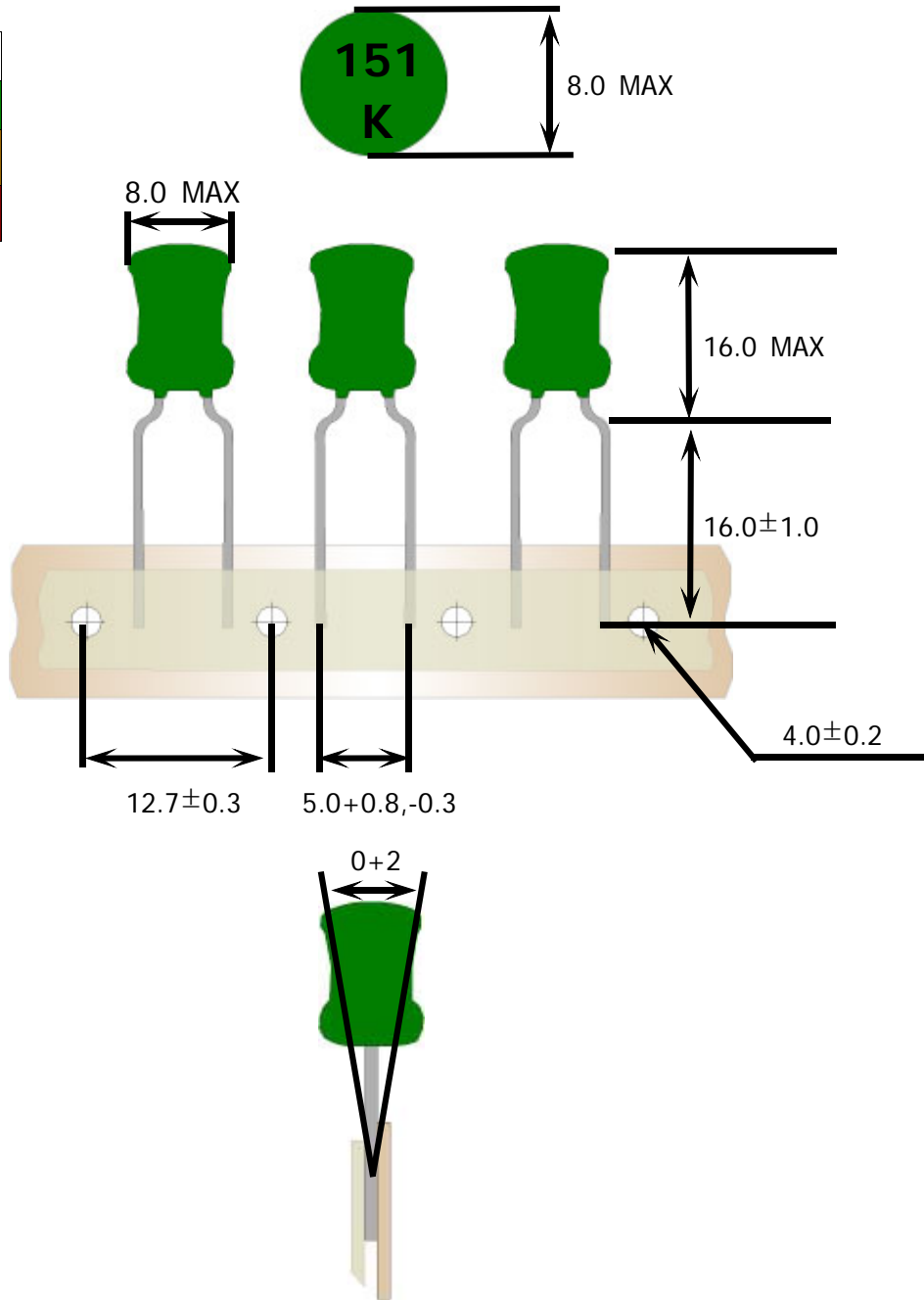
| | | | |
|----------------------|-----------------|-------------|----------------|
| SPECIFICATION | | SHEET NO. | 2 OF 10 |
| | | DATA | 2008. 07. 23. |
| PART NAME | RADIAL INDUCTOR | MODEL NAME | |
| PART NO. | DR2-150uH-T.B | DESCRIPTION | DR 6.5 X 7.5mm |

4-1. APPEARANCE & DIMENSION (UNIT:m/m)

MARKING : 151K or 151

*** TAPING TYPE**

| EPOXY COLOR |
|-------------|
| GREEN |
| BROWN |
| RED |



| NO | REVISION | DATE | CHECK | DRAWN | CHECKED | APPROVED |
|----|----------|------|-------|-------|---------|----------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

CUSTOMER :

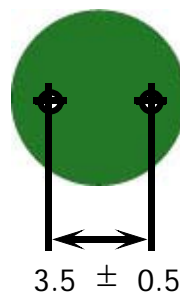
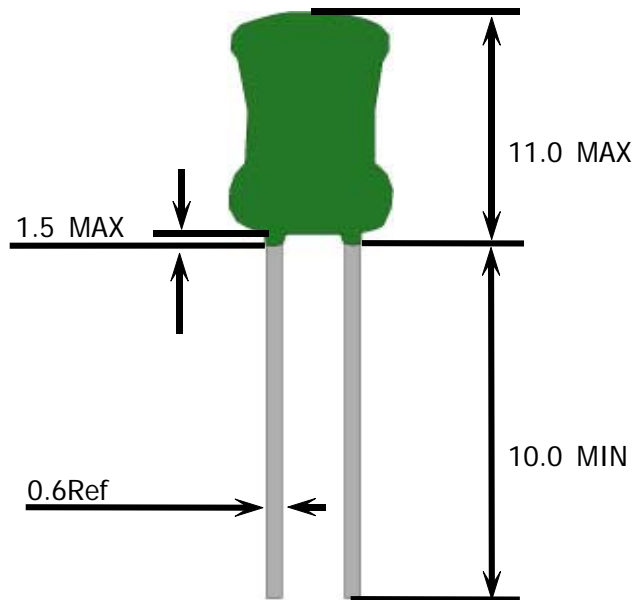
| | | | |
|----------------------|-----------------|-------------|----------------|
| SPECIFICATION | | SHEET NO. | 3 OF 10 |
| | | DATA | 2008. 07. 23. |
| PART NAME | RADIAL INDUCTOR | MODEL NAME | |
| PART NO. | DR2-150uH-T.B | DESCRIPTION | DR 6.5 X 7.5mm |

4-2. APPEARANCE & DIMENSION (UNIT:m/m)

MARKING : 151K or 151

* BULK TYPE

| EPOXY COLOR |
|-------------|
| GREEN |
| BROWN |
| RED |



| NO | REVISION | DATE | CHECK | DRAWN | CHECKED | APPROVED |
|----|----------|------|-------|-------|---------|----------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

CUSTOMER :

| | | | |
|----------------------|-----------------|-------------|----------------|
| SPECIFICATION | | SHEET NO. | 4 OF 10 |
| | | DATA | 2008. 07. 23. |
| PART NAME | RADIAL INDUCTOR | MODEL NAME | |
| PART NO. | DR2-150uH-T.B | DESCRIPTION | DR 6.5 X 7.5mm |

5. WINDING SPEC

| | | | |
|----------------------|--------------|-------------|---------------------------------|
| START & FINISH | TYPE OF WIRE | T U R N S | WINDING METHODE |
| | 2UEW 0.26Φ | 71.5 Ts REF | SOLENOID WINDING [C . C . W] |

6. ELECTRICAL CHARACTERISTIC

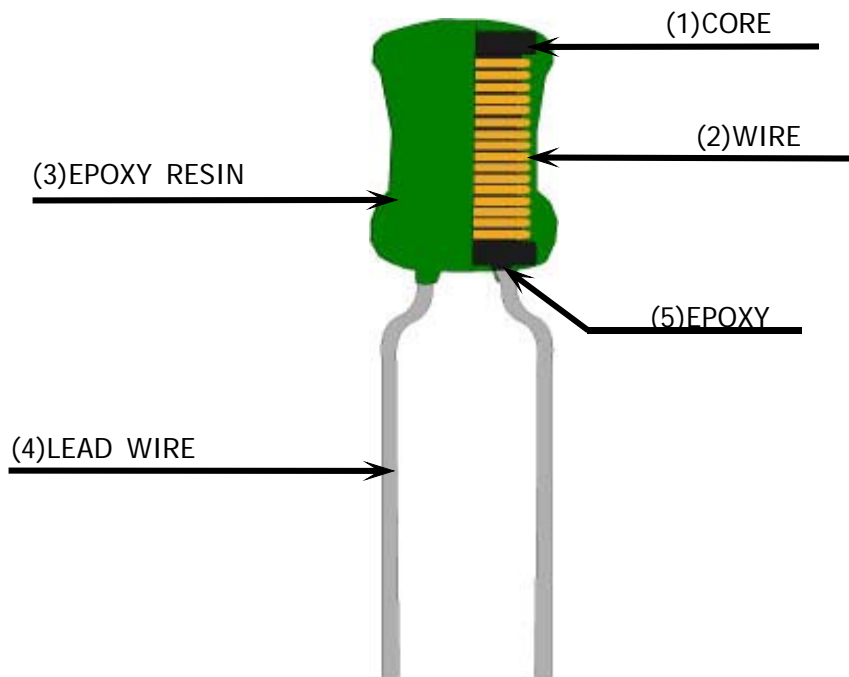
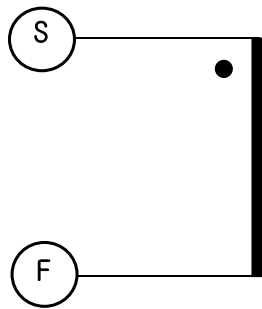
| NO | I T E M | MESURE | SPECIFICATION | REMARKS |
|----|------------------------------------|----------------------|---|--------------------------------------|
| 1 | INDUCTANCE | START & FINISH | <u>150</u> [uH] ± 10 [%] | HIOKI3522 LCR METER at 1kHz 1V |
| 2 | DC RESISTANCE | START & FINISH | <u>0.5</u> [Ω] MAX | WHEATSTONE BRIDGE TYPE 2755 |
| 3 | DIELECTRIC WITHSTANDING TEST | COIL & CORE | AC <u>1</u> [KV] , FREQUANCY <u>60</u> [Hz] , <u>1</u> MINUTES, CUT OFF CURENT <u>2</u> [mA] | NO BREAKDOWN HPT-5010 |
| 4 | INSULATION RESISTANCE | COIL & CORE | DC <u>500</u> [V] , <u>100</u> [MΩ] MIN | DM-500AD |

| NO | REVISION | DATE | CHECK | DRAWN | CHECKED | APPROVED |
|----|----------|------|-------|-------|---------|----------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

CUSTOMER :

| | | | |
|----------------------|-----------------|-------------|----------------|
| SPECIFICATION | | SHEET NO. | 5 OF 10 |
| | | DATA | 2008. 07. 23. |
| PART NAME | RADIAL INDUCTOR | MODEL NAME | |
| PART NO. | DR2-150uH-T.B | DESCRIPTION | DR 6.5 X 7.5mm |

7. SCHEMATIC DIAGRAM



| NO | REVISION | DATE | CHECK | DRAWN | CHECKED | APPROVED |
|----|----------|------|-------|-------|---------|----------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

CUSTOMER :

| | | | |
|----------------------|-----------------|-------------|----------------|
| SPECIFICATION | | SHEET NO. | 6 OF 10 |
| | | DATA | 2008. 07. 23. |
| PART NAME | RADIAL INDUCTOR | MODEL NAME | |
| PART NO. | DR2-150uH-T.B | DESCRIPTION | DR 6.5 X 7.5mm |

8. MATERIAL LIST

| NO | ITEM | MATERIAL & DIMENSION | MANUFACTURE | REMARK |
|----|-------------|---|--|--------------------------------|
| 1 | CORE | SGB / DGB / JA3 DR 6.5 X 7.5mm | JAW SHIANQ CORPORATION CO.,LTD. ZHAOYUAN FLYING ELECTRONIC CO.,LTD. JIACI(ZHUHAI)ELECTRONICS CO.,LTD. | |
| 2 | WIRE | 2UEW 0.26Φ | DONG YANG ELECTRONICS CO., LTD. CHUNHUI ELECTRICAL APPLANCES CO.,LTD. GUANDONG RONSEN SUPER MICRO-WIRE CO.,LTD | E102761S E198440 E164502 |
| 3 | EPOXY RESIN | DP-402NH-P 930A.B GREEN/BROWN/RED | DAE JOO FINE CHEMICAL CO., LTD. SAM SIN CHEMICAL CO.,LTD. | |
| 4 | LEAD WIRE | TPC 0.6Φ TPCS 0.6Φ COPPER-WIRE | SAMATRON CO.,LTD IL-KWANG ELECTRONIC MATERIALS CO.,LTD. YEHUA ELECTRON MATERIAL LIMITED CO.,LTD. | |
| 5 | EPOXY | 6020H | GUANGZHOU WELLS CHEMICAL CO.,LTD. | |
| - | SOLDER BAR | HSE-09 SN 100 SNCU 0.7 | HEESUNG MATERIAL LTD. JIAMENG CO.,LTD. JINTAE CO.,LTD. | |
| - | FLUX | F181 SF-A-2 | ZHUHAI FRIEND INDUSTRIAL CO.,LTD. SOLUX CO.,LTD. | |
| - | INK | 270BK | DOMINO KOREA CO.,LTD. | |

9. TABLE OF STANDARD CHARACTERISTICS OF MATERIALS

| PROPERTY UNIT MATERIAL | μiac ±25% | Bms GAUSS | WORKING Frequency(MHZ) | Tc ℃ | ρ Ω-cm | d g/cm³ | TANσ/μi 10 ⁻⁶ (MHZ) | αμr 10 ⁻⁶ |
|------------------------|--------------|--------------|---------------------------|---------|-----------------|------------|-----------------------------------|-------------------------|
| SGB | 300 | 3300 | 0.1~2.0 | 150 | 10 ⁷ | 4.7 ~ 4.9 | 15(0.1) 80(2) | 25 |

| NO | REVISION | DATE | CHECK | DRAWN | CHECKED | APPROVED |
|----|----------|------|-------|-------|---------|----------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

CUSTOMER :

| | | | |
|----------------------|-----------------|-------------|----------------|
| SPECIFICATION | | SHEET NO. | 7 OF 10 |
| | | DATA | 2008. 07. 23. |
| PART NAME | RADIAL INDUCTOR | MODEL NAME | |
| PART NO. | DR2-150uH-T.B | DESCRIPTION | DR 6.5 X 7.5mm |

10. REMARK-1 / DONG YANG [UL CARD]

Magnet Wire - Component

See General Information for Magnet Wire - Component

DONG YANG ELECTRONICS IND CO LTD

E102761

5-20 BANGYE-RI

MUNMAK-EUB

WONJU-SHI, KANGWON-DO 220-800 REPUBLIC OF KOREA

| Mtl Dsg | Coat Typ | | ANSI Type | TI |
|------------|--------------|------------|-----------|------|
| | BC | OC | | |
| AI-EIW | Polyester- | Polyamide- | MW35 | 200 |
| | imide | imide | | |
| DSB-EIA | Ester-imide | Polyamide | MW76 | 180 |
| DSB-EIA(S) | Solderable | Polyamide | MW78 | 180 |
| | ester-imide | | | |
| EIW | Polyester- | | MW30 | 180 |
| | imide | | | |
| NY-EIW | Polyester- | Polyamide | MW76 | 180 |
| | amide-imide | | | |
| NY-PEW | Polyester | Polyamide | MW24 | 155 |
| NY-PEW(F) | Polyester | Polyamide | MW24 | 155 |
| NY-UEW | Polyurethane | Polyamide | MW80, | 155, |
| | | | MW28# | 130 |
| UEW(F) | Polyurethane | — | MW79, | 155, |

| NO | REVISION | DATE | CHECK | DRAWN | CHECKED | APPROVED |
|----|----------|------|-------|-------|---------|----------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

CUSTOMER :

| | | | |
|----------------------|-----------------|-------------|----------------|
| SPECIFICATION | | SHEET NO. | 8 OF 10 |
| | | DATA | 2008. 07. 23. |
| PART NAME | RADIAL INDUCTOR | MODEL NAME | |
| PART NO. | DR2-150uH-T.B | DESCRIPTION | DR 6.5 X 7.5mm |

10. REMARK-2 / CHUN HUI [UL CARD]

Magnet Wire - Component

See General Information for Magnet Wire - Component

GUANGZHOU CHUNHUI ELECTRICAL APPLIANCES CO LTD E198440
 BLK 7, 8TH FL, ROOM H
 JIANADA GARDEN
 ZHONGSHAN DA DAO
 GUANGZHOU, GUANGDONG 510665 CHINA

| Mtl Dsg | Mark Dsg | Coat Type | | ANSI Type | Temp Class |
|----------|----------|--------------|-------|-----------|------------|
| | | BC | OC | | |
| XUEW-UL@ | (1) | Polyurethane | ?/TD> | MW75 | 130 |

(1)-Marked designations are the same as the material designations.

| NO | REVISION | DATE | CHECK | DRAWN | CHECKED | APPROVED |
|----|----------|------|-------|-------|---------|----------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

CUSTOMER :

| | | | |
|----------------------|-----------------|-------------|----------------|
| SPECIFICATION | | SHEET NO. | 9 OF 10 |
| | | DATA | 2008. 07. 23. |
| PART NAME | RADIAL INDUCTOR | MODEL NAME | |
| PART NO. | DR2-150uH-T.B | DESCRIPTION | DR 6.5 X 7.5mm |

10. REMARK-3 / RONSEN [UL CARD]

| Magnet Wire - Component | | | | | |
|---|----------|--------------------|-----------|-----------|------------|
| See General Information for Magnet Wire - Component | | | | | |
| GUANGDONG RONSEN SUPER MICRO-WIRE CO LTD SANZAO TECHNOLOGICAL INDUSTRY PARK AIRPORT WEST RD ZHUHAI, GUANGDONG 519000 CHINA | | | | E164502 | |
| Mtl Dsg | Mark Dsg | Coat Typ | | ANSI Type | Temp Class |
| | | BC | OC | | |
| EIW | PEW | Modified Polyester | — | MW74-C | 200 |
| | | | | MW30-C | 180# |
| UEW/130 | PUB | Polyurethane | — | MW75-C | 130# |
| UEW/155 | PUF | Polyurethane | — | MW79-C | 155 |
| UEW-Y | PUY | Polyurethane | Polyamide | MW80-C | 155 |
| | | | | MW28-C | 130# |
| S-EIW | PSE | Polyester-imide | — | MW77-C | 180 |
| UEW/180 | PUH | Polyurethane | — | MW82-C | 180 |
| X UEW/180 (QA/180) | | Polyurethane | — | MW82C | 180 |
| X UEW/155 (QA/155) | | Polyurethane | — | MW79C# | 155 |
| X UEW/130 (QA/130) | | Polyurethane | — | MW75C# | 130 |
| X UEW/200 (QA/200) | | Polyurethane | — | @ | 200 |
| X UEW/180-U (QA/180-U) | | Polyurethane | — | MW82C# | 180 |

| NO | REVISION | DATE | CHECK | DRAWN | CHECKED | APPROVED |
|----|----------|------|-------|-------|---------|----------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

CUSTOMER :

| | | | |
|----------------------|-----------------|-------------|----------------|
| SPECIFICATION | | SHEET NO. | 10 OF 10 |
| | | DATA | 2008. 07. 23. |
| PART NAME | RADIAL INDUCTOR | MODEL NAME | |
| PART NO. | DR2-150uH-T.B | DESCRIPTION | DR 6.5 X 7.5mm |

11. INSPECTION DATA

| NO | INDUCTANCE | DC RESISTANCE | 내전압 | 절연저항 |
|-----------|------------|---------------|---------------|------------------|
| SPEC | 150uH±10% | 0.5Ω MAX | AC 1KV 1분 MIN | DC 500V 100MΩMIN |
| 1 | 147.65 | 0.33 | OK | OK |
| 2 | 148.74 | 0.34 | OK | OK |
| 3 | 148.67 | 0.33 | OK | OK |
| 4 | 146.17 | 0.33 | OK | OK |
| 5 | 149.71 | 0.34 | OK | OK |
| 6 | 149.86 | 0.35 | OK | OK |
| 7 | 146.77 | 0.33 | OK | OK |
| 8 | 148.85 | 0.34 | OK | OK |
| 9 | 146.77 | 0.35 | OK | OK |
| 10 | 149.29 | 0.33 | OK | OK |
| \bar{X} | 148.248 | 0.337 | | |
| MIN | 146.17 | 0.33 | | |
| MAX | 149.86 | 0.35 | | |

| NO | REVISION | DATE | CHECK | DRAWN | CHECKED | APPROVED |
|----|----------|------|-------|-------|---------|----------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |