

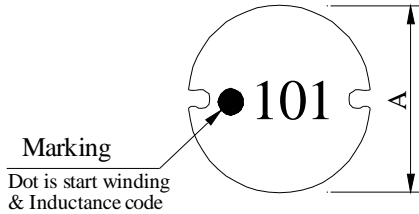
SPECIFICATION FOR APPROVAL

REF : 20090728-A

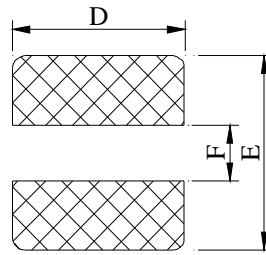
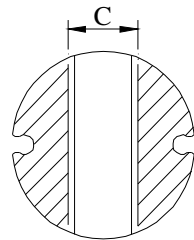
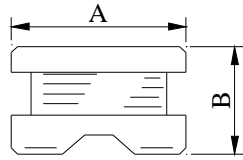
PAGE: 1

| | | | |
|------------|--------------------|----------------|------------------|
| PROD. NAME | SMD POWER INDUCTOR | ABC'S DWG NO. | SR1307□□□□L□-□□□ |
| | | ABC'S ITEM NO. | |

I . CONFIGURATION & DIMENSIONS :

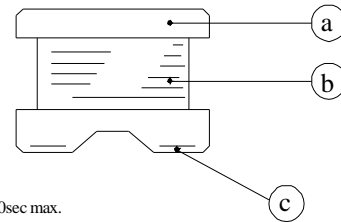
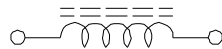


- A : 13.0±0.7 m/m
- B : 7.0±0.3 m/m
- C : 5.0 ref. m/m
- D : 14.0 ref. m/m
- E : 14.0 ref. m/m
- F : 4.5 ref. m/m



(PCB Pattern)

II . SCHEMATIC DIAGRAM :



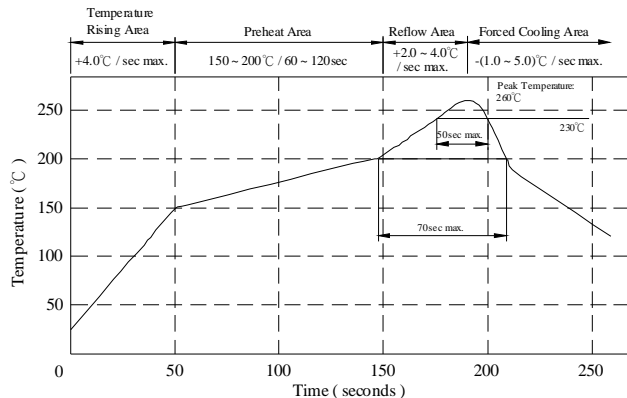
III . MATERIALS :

- a . Core : Ferrite DR core
- b . Wire : Enamelled copper wire (class F & H)
- c . Terminal : Ag/Ni/Sn
- d . Remark : Products comply with RoHS' requirements

Peak Temp : 260°C max.
 Max time above 230°C : 50sec max.
 Max time above 200°C : 70sec max.

IV . GENERAL SPECIFICATION :

- a . Temp. rise : 40°C max.
- b . Rated current : Base on temp. rise & ΔL / LOA=10% typ.
- c . Storage temp. : -40°C ----+125°C
- d . Operating temp. : -40°C ----+105°C
- e . Resistance to solder heat : 260°C.10 secs.



AR-001A



SPECIFICATION FOR APPROVAL

REF : 20090728-A

PAGE: 2

| | | | |
|------------|--------------------|----------------|------------------|
| PROD. NAME | SMD POWER INDUCTOR | ABC'S DWG NO. | SR1307□□□□L□-□□□ |
| | | ABC'S ITEM NO. | |

V . ELECTRICAL CHARACTERISITCS :

| DWG No. | Inductance (μH) | Q ref. | Test Freq. (Hz) | | SRF (MHz) nom. | RDC (mΩ) max. | Irms (A) | Isat (A) |
|------------------|-----------------|--------|-------------------|--------|---------------------|--------------------|------------|------------|
| | | | L | Q | | | | |
| SR13071R5ML□-□□□ | 1.5±20% | 20 | 100K | 7.960M | 65.0 | 5.0 | 9.50 | 20.00 |
| SR13072R2ML□-□□□ | 2.2±20% | 22 | 100K | 7.960M | 50.0 | 6.0 | 9.00 | 18.00 |
| SR13072R7ML□-□□□ | 2.7±20% | 24 | 100K | 7.960M | 40.0 | 8.0 | 8.20 | 16.00 |
| SR13073R3ML□-□□□ | 3.3±20% | 26 | 100K | 7.960M | 38.0 | 8.7 | 7.50 | 15.00 |
| SR13074R7ML□-□□□ | 4.7±20% | 25 | 100K | 7.960M | 36.0 | 10.0 | 7.00 | 13.00 |
| SR13075R6ML□-□□□ | 5.6±20% | 24 | 100K | 7.960M | 28.0 | 15.0 | 6.50 | 11.00 |
| SR13076R8ML□-□□□ | 6.8±20% | 24 | 100K | 7.960M | 26.0 | 17.0 | 6.00 | 10.50 |
| SR13078R2ML□-□□□ | 8.2±20% | 24 | 100K | 7.960M | 24.0 | 19.0 | 5.80 | 9.80 |
| SR1307100ML□-□□□ | 10.0±20% | 22 | 100K | 2.520M | 22.0 | 21.0 | 5.60 | 9.20 |
| SR1307120ML□-□□□ | 12.0±20% | 25 | 100K | 2.520M | 20.0 | 30.0 | 4.80 | 8.00 |
| SR1307150ML□-□□□ | 15.0±20% | 28 | 100K | 2.520M | 17.0 | 34.0 | 4.50 | 7.50 |
| SR1307180ML□-□□□ | 18.0±20% | 28 | 100K | 2.520M | 16.0 | 36.0 | 4.20 | 7.00 |
| SR1307220ML□-□□□ | 22.0±20% | 40 | 100K | 2.520M | 15.0 | 47.0 | 3.60 | 6.50 |
| SR1307270ML□-□□□ | 27.0±20% | 35 | 100K | 2.520M | 11.0 | 60.0 | 3.30 | 5.50 |
| SR1307330KL□-□□□ | 33.0±10% | 35 | 100K | 2.520M | 10.0 | 65.0 | 3.10 | 5.00 |
| SR1307390KL□-□□□ | 39.0±10% | 28 | 100K | 2.520M | 9.0 | 75.0 | 2.90 | 4.60 |
| SR1307470KL□-□□□ | 47.0±10% | 24 | 100K | 2.520M | 7.5 | 82.0 | 2.70 | 4.20 |
| SR1307560KL□-□□□ | 56.0±10% | 22 | 100K | 2.520M | 7.2 | 100.0 | 2.50 | 3.80 |
| SR1307680KL□-□□□ | 68.0±10% | 24 | 100K | 2.520M | 7.0 | 120.0 | 2.30 | 3.50 |
| SR1307820KL□-□□□ | 82.0±10% | 18 | 100K | 2.520M | 6.0 | 140.0 | 2.10 | 3.20 |
| SR1307101KL□-□□□ | 100.0±10% | 25 | 100K | 0.796M | 5.8 | 180.0 | 1.90 | 3.00 |
| SR1307121KL□-□□□ | 120.0±10% | 20 | 100K | 0.796M | 5.5 | 210.0 | 1.80 | 2.80 |
| SR1307151KL□-□□□ | 150.0±10% | 20 | 100K | 0.796M | 4.5 | 250.0 | 1.60 | 2.60 |
| SR1307181KL□-□□□ | 180.0±10% | 18 | 100K | 0.796M | 4.0 | 280.0 | 1.50 | 2.30 |
| SR1307221KL□-□□□ | 220.0±10% | 15 | 100K | 0.796M | 3.8 | 360.0 | 1.30 | 2.10 |
| SR1307271KL□-□□□ | 270.0±10% | 15 | 100K | 0.796M | 3.5 | 410.0 | 1.20 | 1.80 |
| SR1307331KL□-□□□ | 330.0±10% | 15 | 100K | 0.796M | 3.2 | 520.0 | 1.10 | 1.60 |
| SR1307391KL□-□□□ | 390.0±10% | 12 | 100K | 0.796M | 2.5 | 600.0 | 1.00 | 1.50 |
| SR1307471KL□-□□□ | 470.0±10% | 12 | 100K | 0.796M | 2.2 | 720.0 | 0.90 | 1.40 |
| SR1307561KL□-□□□ | 560.0±10% | 10 | 100K | 0.796M | 2.0 | 880.0 | 0.85 | 1.30 |
| SR1307681KL□-□□□ | 680.0±10% | 10 | 100K | 0.796M | 1.6 | 1000.0 | 0.80 | 1.20 |
| SR1307821KL□-□□□ | 820.0±10% | 10 | 100K | 0.796M | 1.5 | 1300.0 | 0.75 | 1.10 |
| SR1307102KL□-□□□ | 1000.0±10% | 10 | 100K | 0.252M | 1.4 | 1600.0 | 0.65 | 1.00 |

- 1). □ : Packaging information... [A] : Bulk [B] : Taping Reel
- 2). "- □□□ " : Reference code
- 3). Inductance Test Freq. at 100KHz / 0.1V.
- 4). Irms Base on ΔT = 40°C max.
- 5). Isat Base on ΔL/L0A = 10% typ.

AR-001A



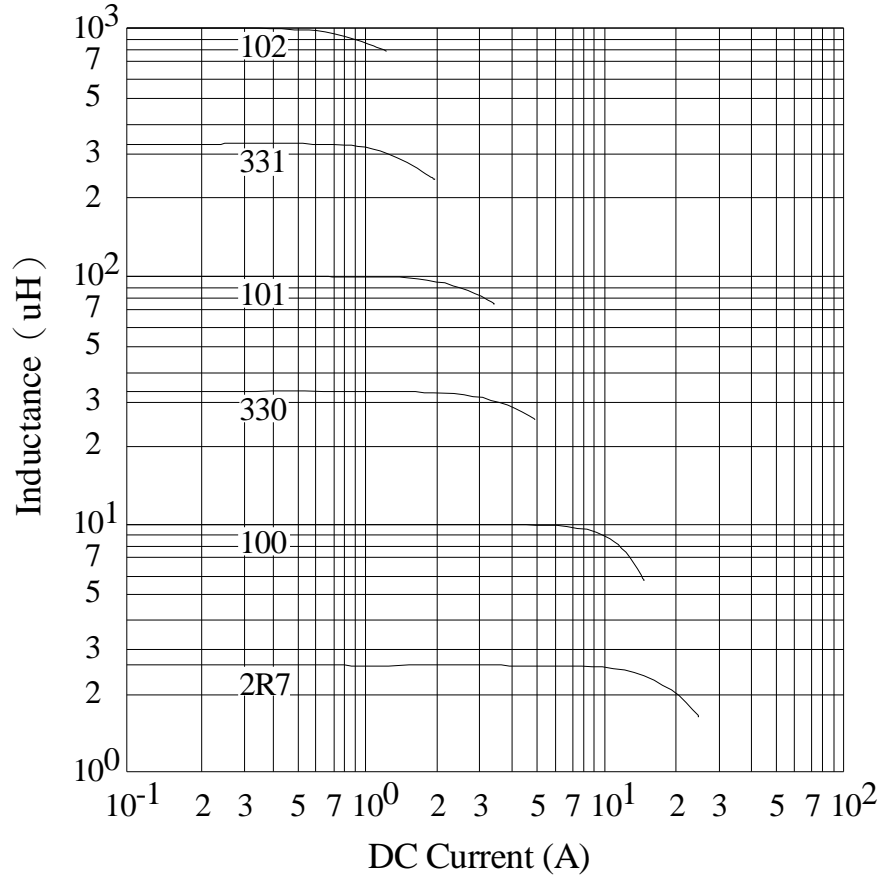
SPECIFICATION FOR APPROVAL

REF : 20090728-A

PAGE: 3

| | | | |
|------------|--------------------|----------------|------------------|
| PROD. NAME | SMD POWER INDUCTOR | ABC'S DWG NO. | SR1307□□□□L□-□□□ |
| | | ABC'S ITEM NO. | |

VI . INDUCTANCE VS. DC CURRENT CURVE :



AR-001A



SPECIFICATION FOR APPROVAL

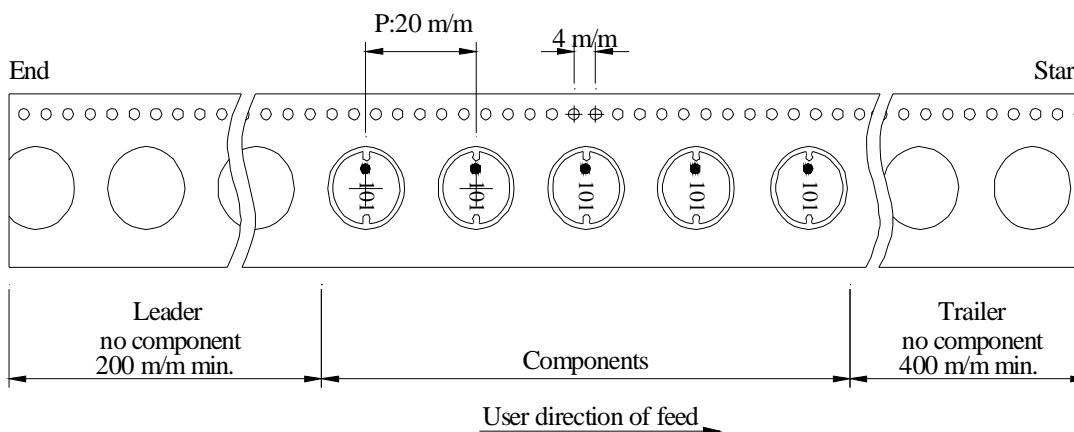
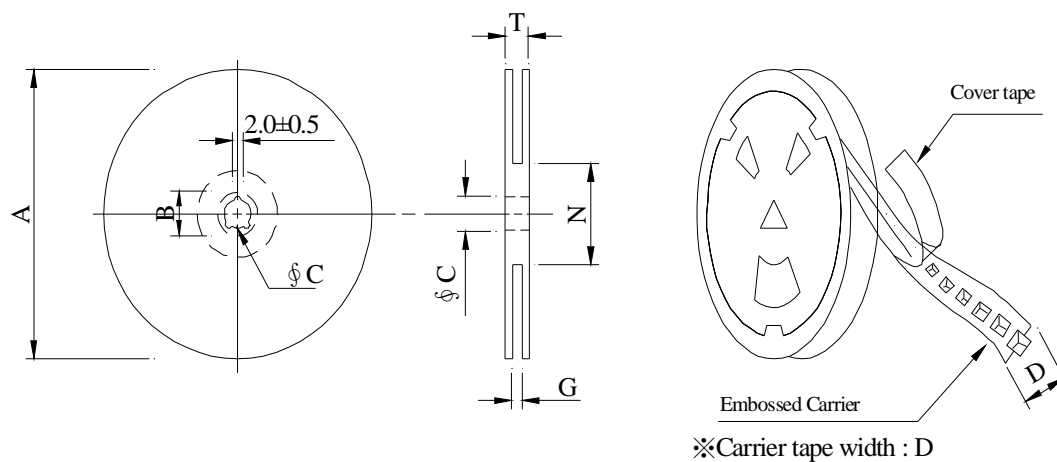
REF : 20090728-A

PAGE: 4

| | | | |
|------------|--------------------|----------------|------------------|
| PROD. NAME | SMD POWER INDUCTOR | ABC'S DWG NO. | SR1307□□□□L□-□□□ |
| | | ABC'S ITEM NO. | |

VII . PACKAGING INFORMATION :

(1) Configuration



(2) Dimensions

Unit:m/m

| Style | A | B | C | D | G | N | T |
|---------|-----|--------|--------|----|------------------|------------------|------|
| 13 - 24 | 330 | 21±0.8 | 13±0.5 | 24 | 26 ⁺⁰ | 50 ⁻⁰ | 30.4 |

(3) QTY & G.W. Per package

| Series | Inner : Reel | | | Outer : Carton | | |
|--------|--------------|-----------|---------|----------------|-----------|--------------|
| | QTY (pcs) | G.W. (gw) | Style | QTY (pcs) | G.W. (Kg) | Size (cm) |
| SR1307 | 400 | 1,800 | 13 - 24 | 1,600 | 9.5 | 40 x 40 x 24 |

AR-001A



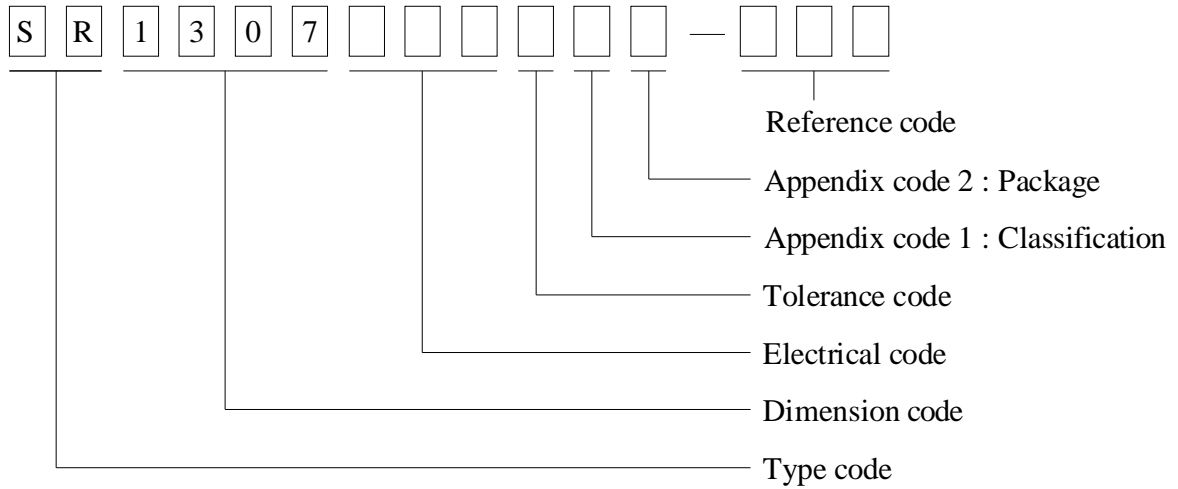
SPECIFICATION FOR APPROVAL

REF : 20090728-A

PAGE: 5

| | | | |
|---------------|--------------------|----------------|------------------|
| PROD. NAME | SMD POWER INDUCTOR | ABC'S DWG NO. | SR1307□□□□L□-□□□ |
| | | ABC'S ITEM NO. | |

VIII . DWGING NUMBER EXPRESSION :



Appendix code 1 : Product Classification

- L : Lead Free Standard products comply with RoHS' requirements
- 1 ~ 9 : Lead Free Special products comply with RoHS' requirements

Appendix code 2 : Package Information

| Code | Inner package | Inner package Q'TY | Remark |
|------|------------------------|--------------------|--------|
| A | T.B.D. | T.B.D. | |
| B | T / R (Reel package) | 400 pcs | |

AR-001A



SPECIFICATION FOR APPROVAL

REF : 20090728-A

PAGE: 6

| | | | |
|---------------|--------------------|----------------|------------------|
| PROD. NAME | SMD POWER INDUCTOR | ABC'S DWG NO. | SR1307□□□□L□-□□□ |
| | | ABC'S ITEM NO. | |

IX . RELIABILITY TEST :

| Test item | Specification | Test condition | | | | | | |
|---------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---|----------------------|--------------------------|---|-----------------------|
| Solderability | More than 95% of the terminal electrode shall be covered With fresh solder. | Preheat : 155°C / 4 hours. Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : 235±5°C Flux : Rosin Dip time : 5±0.5 seconds | | | | | | |
| Thermal shock test (Temp. cycle) | Electrical oharacteristics shall not change more than ±20% | <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Room temp. 15 minutes</td> <td style="text-align: center;">→</td> <td style="text-align: center;">-40 °C 30 minutes</td> </tr> <tr> <td style="text-align: center;">Room temp. 15 minutes</td> <td style="text-align: center;">→</td> <td style="text-align: center;">+105 °C 30 minutes</td> </tr> </table> <p>Total : 50 cycles</p> | Room temp. 15 minutes | → | -40 °C 30 minutes | Room temp. 15 minutes | → | +105 °C 30 minutes |
| Room temp. 15 minutes | | → | -40 °C 30 minutes | | | | | |
| Room temp. 15 minutes | | → | +105 °C 30 minutes | | | | | |
| Humidity test | | Temperature : 40±2°C Humidity : 90±5% Time : 1000 hours | | | | | | |
| High temp. Resistance test | Temperature : 105±5°C Applied current : Per spec. Time : 96 hours | | | | | | | |

AR-001A



SPECIFICATION FOR APPROVAL

REF : 20090728-A

PAGE: 7

| | | | |
|---------------|--------------------|----------------|------------------|
| PROD. NAME | SMD POWER INDUCTOR | ABC'S DWG NO. | SR1307□□□□L□-□□□ |
| | | ABC'S ITEM NO. | |

X . UL CARD :

| | |
|------------------------------------------------------------------|-------------------|
| OBMW2 | September 8, 2000 |
| Magnet Wire-Component | |
| JUNG SHING WIRE CO LTD | E174837 |
| 231 CHUNG CHENG RD, SEC 3 JEN-TEH HSIANG, TAINAN HSIEN TAIWAN | |

| Mtl Dsg | Mark Dsg | BC | Coat Typ | OC | ANSI Type | Temp Class |
|-------------|----------|--------------------|--------------------|-----|-----------|------------|
| AIW | --- | Polyamideimide | --- | --- | MW81-C | 220 |
| CFUEWB | --- | Polyurethane | --- | --- | MW75C | 130 |
| EIAIW | --- | Polyesterimide | Polyamideimide | --- | MW35C | 200 |
| EILOCKY | --- | Polyesterimide | Polyamide | --- | --- | 180 |
| EILOCKW | --- | Polyesterimide | Modified Epoxy | --- | --- | 200 |
| EIW | --- | Polyesterimide | --- | --- | --- | 220 |
| EIW-2 | --- | Polyesterimide | --- | --- | MW74-C | 200 |
| FL.EILOCKY | --- | Modified Polyester | Polyamide | --- | --- | 155 |
| L.SFFW | --- | Polyurethane | --- | --- | MW79-C | 155 |
| L.SUEW | --- | Polyurethane | --- | --- | --- | 130 |
| PEW | --- | Polyester | --- | --- | --- | 155 |
| PEY | --- | Polyester | Nylon | --- | MW24-C | 155 |
| SF.FLW | --- | Modified Polyester | --- | --- | MW26C | 155 |
| SF.EIW | --- | Polyesterimide | --- | --- | MW77C | 180 |
| SF.BY@ | --- | Modified Polyester | Nylon | --- | MW27-C | 155 |
| SF.FLY@ | --- | Modified Polyester | Nylon | --- | MW27-C | 155 |
| SF.BLOCKBS | --- | Modified Polyester | Modified Polyamide | --- | --- | 155 |
| SF.EILOCKY# | --- | Polyesterimide | Polyamide | --- | --- | 180 |
| SF.EILOCKBS | --- | Polyesterimide | Modified Polyamide | --- | --- | 180 |
| SF.BW@ | --- | Modified Polyester | --- | --- | MW26C | 155 |
| SFFW | --- | Polyurethane | --- | --- | MW79 | 155 |

A not-for-profit organization dedicated to public safety and committed to quality service

Page 1 of 2

| Mtl Dsg | Mark Dsg | BC | Coat Typ | OC | ANSI Type | Temp Class |
|---------|----------|--------------|-----------|-----|-----------|------------|
| SFFY | --- | Polyurethane | Polyamide | --- | MW80C | 155 |
| UEW-1 | --- | Polyurethane | --- | --- | MW2-C | 105 |
| UEW-2 | --- | Polyurethane | --- | --- | --- | 130 |
| UEW-4 | --- | Polyurethane | --- | --- | MW75C | 130 |
| UEY | --- | Polyurethane | Nylon | --- | MW28-C | 130 |
| UEY-2 | --- | Polyurethane | Polyamide | --- | MW28-C | 130 |

@ - May be suffixed by LZ; # - May be suffixed by LZ, EL or LZI.
LZ - Signifies magnd wires twisted together; EL - signifies base coated magnet wire laid parallel with top coat applied overall; LZL - signifies base coated magnet wire twisted together and covered with top coat overall.

Marking: Company name or trademarks JSW 或 榮星電線 , material designation or marked designation on packaed or reel, and Recognized Component Mark.

See General Information Preceding These Recognitions
For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Page 2 of 2

AR-001A



千如電子集團

ABC ELECTRONICS GROUP

SPECIFICATION FOR APPROVAL

REF : 20090728-A

PAGE: 8

| | | | |
|---------------|--------------------|----------------|------------------|
| PROD. NAME | SMD POWER INDUCTOR | ABC'S DWG NO. | SR1307□□□□L□-□□□ |
| | | ABC'S ITEM NO. | |

X . UL CARD :

OBMW2 October 06, 2005

Magnet Wire-Component

ELEKTRISOLA (MALAYSLA) SDN BHD E1433 12

JALAN DAMAI SATU JANDA BAIK 28750 BENTONG, PAHANG

DARUL MAKMUR MALAYSIA

| Mtl Dsg | Mark Dsg | Coating Type | BC | OC | ANSI Typ | Temp Class |
|---------------|--------------|-----------------------------|-------|----|----------|------------|
| Estersol 180 | E180 | Polyesterimide (solderable) | — | — | MW-77 | 180 |
| Amldester 200 | A200 | Polyesterimide | — | — | MW-74 | 200 |
| Polysol-N 155 | PN155 | Polyurethane | Nylon | — | MW-80, | 155, |
| | | | | | MW-28, | 130 |
| Polysol 155 | P155, G155 | Polyurethane | — | — | MW-79, | 155, |
| | | | | | MW-75, | 130 |
| Polysol 155g | Pg155 | Polyurethane | — | — | MW-75 | 130 |
| Polysol 155p | Pp155,Gp155 | Polyurethane | — | — | MW-79 | 155 |
| Polysol 160 | P160 | Polyurethane | — | — | MW-79 | 155 |
| Polysol 180 | P180,G180 | Polyurethane | — | — | MW-82 | 180 |
| | | | | | MW-79 | 155 |
| Polysol 170 | P170 or G170 | Polyurethane | — | — | MW-79 | 155 |
| Polysol-N 180 | PN180 | Polyurethane | Nylon | — | MW-83 | 180 |
| Polysol P155p | P155p | Polyurethane | — | — | MW-79 | 155 |

Marking : Company name, material designation or marked designation and factory identification on package ok reel

See General Information preceding These Recognitions

For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

AR-001A

