

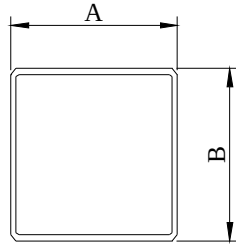
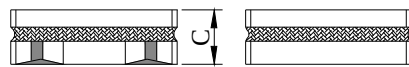
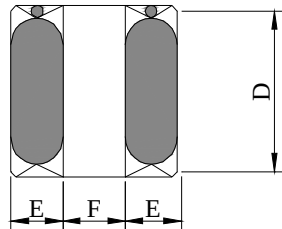
# SPECIFICATION FOR APPROVAL

REF : 20091116-C

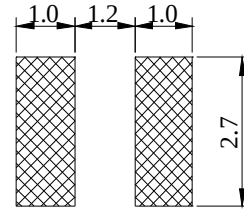
PAGE: 1

|               |                    |                |                  |
|---------------|--------------------|----------------|------------------|
| PROD.<br>NAME | SMD POWER INDUCTOR | ABC'S DWG NO.  | SN3010□□□□L□-□□□ |
|               |                    | ABC'S ITEM NO. |                  |

## I . CONFIGURATION & DIMENSIONS :

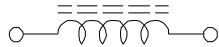
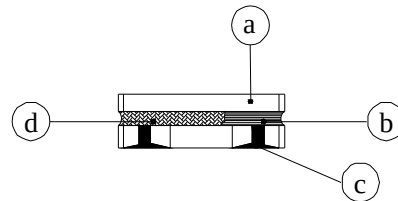


|     |                |       |
|-----|----------------|-------|
| A : | $3.0 \pm 0.10$ | m / m |
| B : | $3.0 \pm 0.10$ | m / m |
| C : | 1.0 max.       | m / m |
| D : | 2.7 typ.       | m / m |
| E : | $0.9 \pm 0.20$ | m / m |
| F : | $1.2 \pm 0.20$ | m / m |



( PCB Pattern )

## II . SCHEMATIC DIAGRAM :



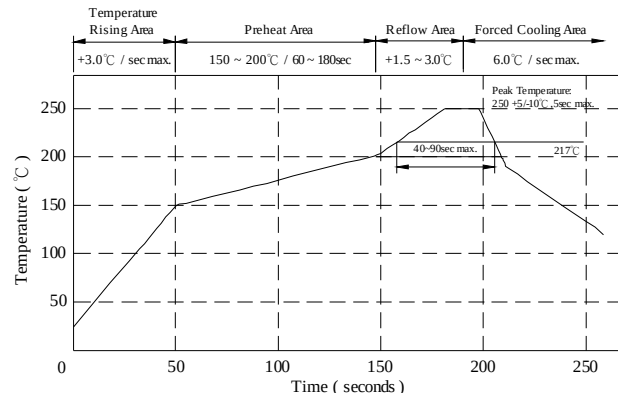
## III . MATERIALS :

- a . Core : Ferrite core
- b . Wire : Enamelled Copper Wire ( class H )
- c . Terminal : Ni/Cu/Ag alloy with Sn
- d . Coating : Magnetic Epoxy resin
- e . Remark : Products comply with RoHS' requirements

## IV . GENERAL SPECIFICATION :

- a . Storage Temp. :  $-40^{\circ}\text{C}$  ----  $+85^{\circ}\text{C}$
- b . Operating Temp. :  $-40^{\circ}\text{C}$  ----  $+125^{\circ}\text{C}$
- c . Resistance To Solder Heat :  $260^{\circ}\text{C}$ .10 Secs.

Peak Temp :  $255^{\circ}\text{C}$  max.  
Max time above  $217^{\circ}\text{C}$  : 90sec max.



AR-001A

# SPECIFICATION FOR APPROVAL

REF : 20091116-C

PAGE: 2

|               |                    |                |                  |
|---------------|--------------------|----------------|------------------|
| PROD.<br>NAME | SMD POWER INDUCTOR | ABC'S DWG NO.  | SN3010□□□□L□-□□□ |
|               |                    | ABC'S ITEM NO. |                  |

## V . ELECTRICAL CHARACTERISTICS :

| DWG No.          | Inductance<br>@0.1V/1MHz<br>( $\mu$ H ) | RDC<br>( $\Omega$ ) |       | SRF<br>( MHz )<br>min. | Irms<br>( A )<br>typ. | Isat<br>( A )<br>typ. |
|------------------|-----------------------------------------|---------------------|-------|------------------------|-----------------------|-----------------------|
|                  |                                         | typ.                | max.  |                        |                       |                       |
| SN30101R0YL□-□□□ | 1.0 $\pm$ 30%                           | 0.065               | 0.078 | 180                    | 1.700                 | 1.950                 |
| SN30101R5YL□-□□□ | 1.5 $\pm$ 30%                           | 0.080               | 0.096 | 140                    | 1.650                 | 1.600                 |
| SN30102R2ML□-□□□ | 2.2 $\pm$ 20%                           | 0.095               | 0.114 | 100                    | 1.450                 | 1.450                 |
| SN30103R3ML□-□□□ | 3.3 $\pm$ 20%                           | 0.160               | 0.192 | 80                     | 1.300                 | 1.050                 |
| SN30104R7ML□-□□□ | 4.7 $\pm$ 20%                           | 0.190               | 0.228 | 60                     | 1.100                 | 0.950                 |
| SN30106R8ML□-□□□ | 6.8 $\pm$ 20%                           | 0.300               | 0.360 | 50                     | 0.850                 | 0.760                 |
| SN3010100ML□-□□□ | 10.0 $\pm$ 20%                          | 0.450               | 0.540 | 45                     | 0.720                 | 0.610                 |
| SN3010150ML□-□□□ | 15.0 $\pm$ 20%                          | 0.740               | 0.888 | 35                     | 0.560                 | 0.480                 |
| SN3010220ML□-□□□ | 22.0 $\pm$ 20%                          | 0.980               | 1.176 | 25                     | 0.500                 | 0.420                 |
| SN3010330ML□-□□□ | 33.0 $\pm$ 20%                          | 1.550               | 1.860 | 24                     | 0.415                 | 0.340                 |
| SN3010470ML□-□□□ | 47.0 $\pm$ 20%                          | 2.000               | 2.400 | 19                     | 0.320                 | 0.270                 |

1). □ : Packaging information ... ☐ Bulk ☐ Taping Reel

2). Irms base on Temp. rise 40°C typ.

3). Isat base on  $\Delta$ L/L0A=30% typ.

# SPECIFICATION FOR APPROVAL

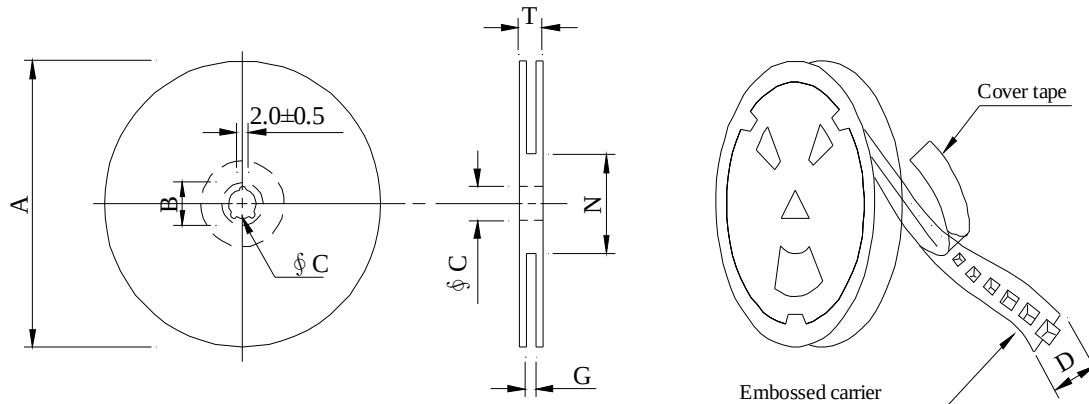
REF : 20091116-C

PAGE: 3

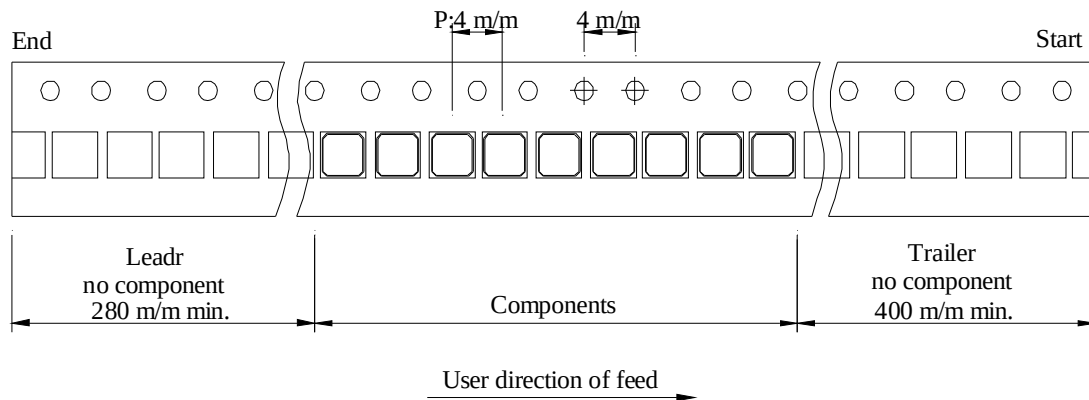
|               |                    |                |                  |
|---------------|--------------------|----------------|------------------|
| PROD.<br>NAME | SMD POWER INDUCTOR | ABC'S DWG NO.  | SN3010□□□□L□-□□□ |
|               |                    | ABC'S ITEM NO. |                  |

## VI . PACKAGING INFORMATION

### ( 1 ) Configuration



※Carrier tape width : D



### ( 2 ) Dimensions

Unit:m/m

| Style   | A   | B      | C  | D | G                | N                | T    |
|---------|-----|--------|----|---|------------------|------------------|------|
| 07 - 08 | 178 | 21±0.8 | 13 | 8 | 10 <sup>+0</sup> | 50 <sup>-0</sup> | 12.5 |

### ( 3 ) Q'TY & G.W. Per package

| Series | Inner : Reel |           |         | Outer : Carton |           |              |
|--------|--------------|-----------|---------|----------------|-----------|--------------|
|        | Q'TY (pcs)   | G.W. (gw) | Style   | Q'TY (pcs)     | G.W. (Kg) | Size (cm)    |
| SN3010 | 2000         | 500       | 07 - 08 | 80,000         | 17.5      | 42 x 41 x 24 |

AR-001A

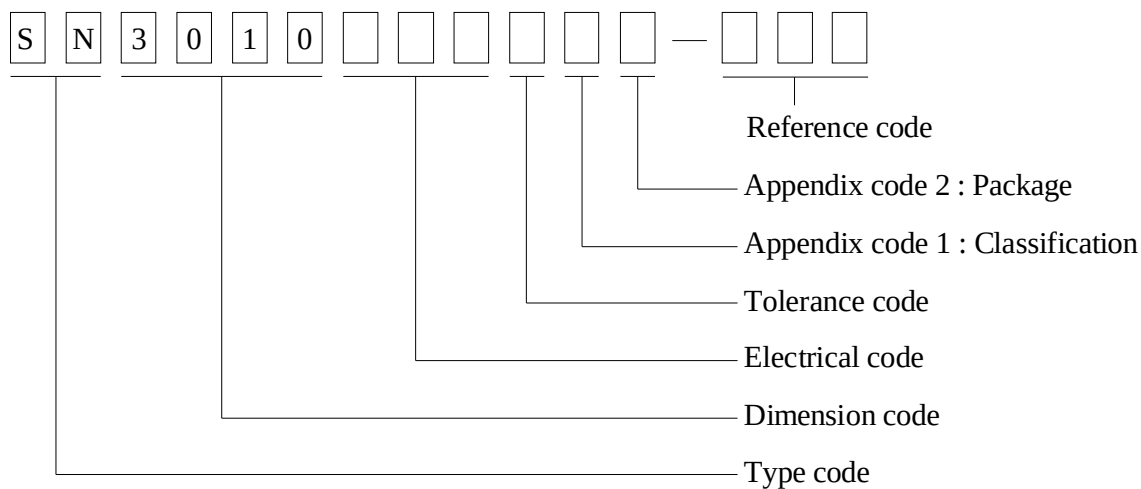
# SPECIFICATION FOR APPROVAL

REF : 20091116-C

PAGE: 4

|               |                    |                |                  |
|---------------|--------------------|----------------|------------------|
| PROD.<br>NAME | SMD POWER INDUCTOR | ABC'S DWG NO.  | SN3010□□□□L□-□□□ |
|               |                    | ABC'S ITEM NO. |                  |

## VII . 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 ) | 2000 pcs           |        |

# SPECIFICATION FOR APPROVAL

REF : 20091116-C

PAGE: 5

|               |                    |                |                  |
|---------------|--------------------|----------------|------------------|
| PROD.<br>NAME | SMD POWER INDUCTOR | ABC'S DWG NO.  | SN3010□□□□L□-□□□ |
|               |                    | ABC'S ITEM NO. |                  |

## VIII . RELIABILITY TEST :

| Test item                             | Specification                                                               | Test condition                                                                                                                                                         |
|---------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Solderability                         | More than 90% of the terminal electrode shall be covered With fresh solder. | Preheat : 150±25℃ for 60 seconds.<br>Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent<br>Solder temp. : 235±5℃<br>Flux : Rosin<br>Dip time : 4±1 seconds                    |
| Thermal shock test<br>( Temp. cycle ) | Electrical oharacteristics shall not change more than ±20%                  | <div> Room temp.      →      -40 ℃<br/> 15 minutes      30 minutes </div> <div> Room temp.      →      +125 ℃<br/> 15 minutes      30 minutes </div> Total : 50 cycles |
| Humidity test                         |                                                                             | Temperature : 40±2℃<br>Humidity : 90~95%<br>Applied current : Per spec.<br>Time : 500 hours                                                                            |
| High temp.<br>Resistance test         |                                                                             | Temperature : 125±2℃<br>Applied current : Per spec.<br>Time : 500 hours                                                                                                |



# SPECIFICATION FOR APPROVAL

REF : 20091116-C

PAGE: 6

|               |                    |                |                  |
|---------------|--------------------|----------------|------------------|
| PROD.<br>NAME | SMD POWER INDUCTOR | ABC'S DWG NO.  | SN3010□□□□L□-□□□ |
|               |                    | ABC'S ITEM NO. |                  |

## IX . UL CARD :

OBMW2

October 06, 2005

Magnet Wire-Component

ELEKTRISOLA (MALAYSLA) SDN BHD

E143312

JALAN DAMAI SATU JANDA BAIK 28750 BENTONG, PAHANG

DARUL MAKMUR MALAYSIA

| Mtl Dsg       | Mark Dsg     | Coating Type<br>BC             | OC    | ANSI<br>Typ | Temp<br>Class |
|---------------|--------------|--------------------------------|-------|-------------|---------------|
| Estersol 180  | E180         | Polyesterimide<br>(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        |                                | —     | 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

