

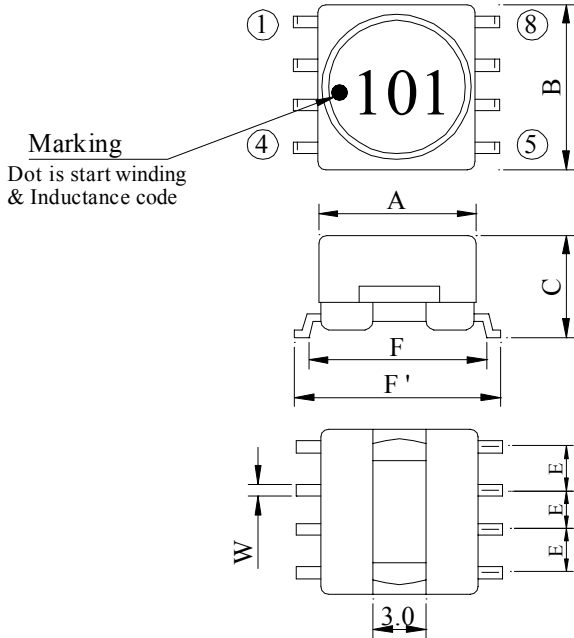
# SPECIFICATION FOR APPROVAL

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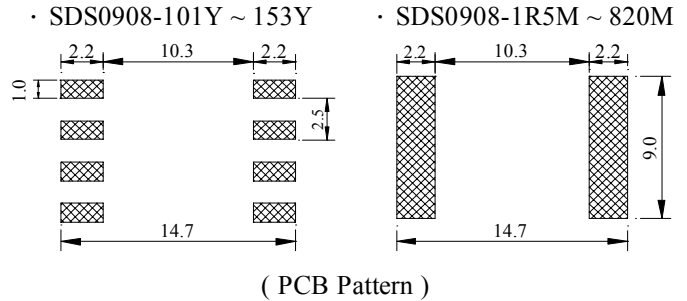
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|            |                                |                |                  |
|------------|--------------------------------|----------------|------------------|
| PROD. NAME | SHIELDED SMD<br>POWER INDUCTOR | ABC'S DWG NO.  | SS0908□□□□L□-□□□ |
|            |                                | ABC'S ITEM NO. |                  |

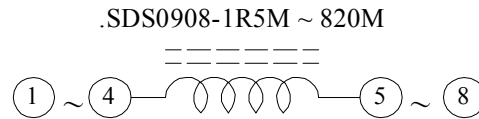
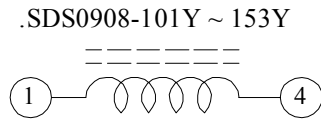
## I . CONFIGURATION & DIMENSIONS :



- A : 9.5±0.3      m/m
- B : 10.5 max.      m/m
- C : 7.5±0.3      m/m
- E : 2.5±0.3      m/m
- F : 11.0±0.5      m/m
- F' : 12.7±0.8      m/m
- W : 0.6 typ.      m/m

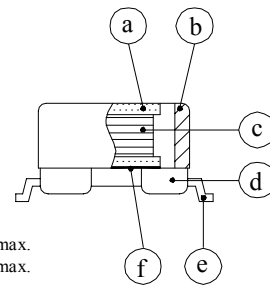


## II . SCHEMATIC DIAGRAM :

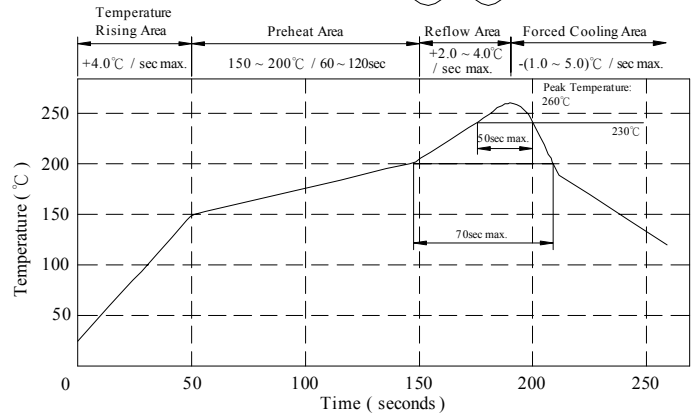


## III . MATERIALS :

- a . Core : Ferrite DR core
- b . Core : Ferrite RI core
- c . Wire : Enamelled copper wire ( class F )
- d . Base : LCP
- e . Terminal : Cu/Ni/Sn
- f . Adhesive : Epoxy resin
- g . 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% max.
- c . Storage temp. : -40°C ----+125°C
- d . Operating temp. : -40°C ----+105°C
- e . Resisance to solder heat : 260°C . 10 secs.

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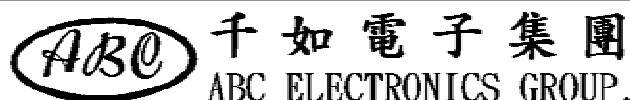
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|            |                                | ABC'S ITEM NO. |                  |

## V . ELECTRICAL CHARACTERISTICS :

| DWG No.          | Inductance<br>( $\mu$ H) | Q<br>nom. | Test Freq. ( Hz ) |        | SRF<br>( MHz )<br>nom. | RDC<br>( $\Omega$ )<br>max | IDC<br>( mA )<br>max |
|------------------|--------------------------|-----------|-------------------|--------|------------------------|----------------------------|----------------------|
|                  |                          |           | L                 | Q      |                        |                            |                      |
| SS09081R5ML□-□□□ | 1.50±20%                 | 20        | 1K                | 7.960M | 65.00                  | 0.014                      | 5600                 |
| SS09082R7ML□-□□□ | 2.70±20%                 | 20        | 1K                | 7.960M | 50.00                  | 0.019                      | 4800                 |
| SS09083R9ML□-□□□ | 3.90±20%                 | 20        | 1K                | 7.960M | 35.00                  | 0.021                      | 4400                 |
| SS09085R6ML□-□□□ | 5.60±20%                 | 18        | 1K                | 7.960M | 25.00                  | 0.027                      | 3800                 |
| SS09087R5ML□-□□□ | 7.50±20%                 | 18        | 1K                | 7.960M | 15.00                  | 0.032                      | 3400                 |
| SS0908100ML□-□□□ | 10.00±20%                | 33        | 1K                | 2.520M | 11.00                  | 0.040                      | 3000                 |
| SS0908120ML□-□□□ | 12.00±20%                | 40        | 1K                | 2.520M | 11.00                  | 0.050                      | 2500                 |
| SS0908150ML□-□□□ | 15.00±20%                | 45        | 1K                | 2.520M | 8.50                   | 0.065                      | 2200                 |
| SS0908180ML□-□□□ | 18.00±20%                | 40        | 1K                | 2.520M | 8.50                   | 0.075                      | 2000                 |
| SS0908220ML□-□□□ | 22.00±20%                | 35        | 1K                | 2.520M | 6.00                   | 0.080                      | 1900                 |
| SS0908270ML□-□□□ | 27.00±20%                | 45        | 1K                | 2.520M | 6.00                   | 0.090                      | 1800                 |
| SS0908330ML□-□□□ | 33.00±20%                | 40        | 1K                | 2.520M | 5.00                   | 0.100                      | 1700                 |
| SS0908390ML□-□□□ | 39.00±20%                | 45        | 1K                | 2.520M | 5.00                   | 0.135                      | 1500                 |
| SS0908470ML□-□□□ | 47.00±20%                | 40        | 1K                | 2.520M | 4.00                   | 0.150                      | 1400                 |
| SS0908560ML□-□□□ | 56.00±20%                | 35        | 1K                | 2.520M | 3.00                   | 0.165                      | 1350                 |
| SS0908680ML□-□□□ | 68.00±20%                | 30        | 1K                | 2.520M | 2.50                   | 0.184                      | 1250                 |
| SS0908820ML□-□□□ | 82.00±20%                | 30        | 1K                | 2.520M | 2.40                   | 0.260                      | 1050                 |
| SS0908101YL□-□□□ | 100.00±15%               | 40        | 1K                | 0.796M | 6.00                   | 0.280                      | 1000                 |
| SS0908121YL□-□□□ | 120.00±15%               | 42        | 1K                | 0.796M | 5.70                   | 0.340                      | 900                  |
| SS0908151YL□-□□□ | 150.00±15%               | 45        | 1K                | 0.796M | 4.60                   | 0.450                      | 800                  |
| SS0908181YL□-□□□ | 180.00±15%               | 35        | 1K                | 0.796M | 4.20                   | 0.500                      | 700                  |
| SS0908221YL□-□□□ | 220.00±15%               | 35        | 1K                | 0.796M | 3.80                   | 0.600                      | 650                  |
| SS0908271YL□-□□□ | 270.00±15%               | 30        | 1K                | 0.796M | 3.40                   | 0.700                      | 600                  |
| SS0908331YL□-□□□ | 330.00±15%               | 30        | 1K                | 0.796M | 3.00                   | 0.800                      | 550                  |
| SS0908391YL□-□□□ | 390.00±15%               | 33        | 1K                | 0.796M | 2.60                   | 1.000                      | 500                  |
| SS0908471YL□-□□□ | 470.00±15%               | 30        | 1K                | 0.796M | 2.30                   | 1.150                      | 450                  |
| SS0908561YL□-□□□ | 560.00±15%               | 35        | 1K                | 0.796M | 2.20                   | 1.500                      | 380                  |
| SS0908681YL□-□□□ | 680.00±15%               | 30        | 1K                | 0.796M | 2.00                   | 1.700                      | 350                  |
| SS0908821YL□-□□□ | 820.00±15%               | 35        | 1K                | 0.796M | 1.90                   | 2.200                      | 320                  |
| SS0908102YL□-□□□ | 1000.00±15%              | 85        | 1K                | 0.252M | 1.80                   | 2.500                      | 300                  |
| SS0908152YL□-□□□ | 1500.00±15%              | 120       | 1K                | 0.252M | 1.30                   | 4.000                      | 250                  |
| SS0908222YL□-□□□ | 2200.00±15%              | 95        | 1K                | 0.252M | 1.00                   | 5.000                      | 200                  |
| SS0908332YL□-□□□ | 3300.00±15%              | 95        | 1K                | 0.252M | 0.90                   | 8.000                      | 150                  |
| SS0908472YL□-□□□ | 4700.00±15%              | 90        | 1K                | 0.252M | 0.80                   | 12.000                     | 120                  |
| SS0908682YL□-□□□ | 6800.00±15%              | 90        | 1K                | 0.252M | 0.60                   | 16.500                     | 100                  |
| SS0908822YL□-□□□ | 8200.00±15%              | 85        | 1K                | 0.252M | 0.50                   | 24.000                     | 97                   |
| SS0908103YL□-□□□ | 10000.00±15%             | 110       | 1K                | 79.60K | 0.50                   | 26.000                     | 95                   |
| SS0908153YL□-□□□ | 15000.00±15%             | 130       | 1K                | 79.60K | 0.40                   | 40.000                     | 75                   |

- 1). □ : Packaging information... **A** □ Bulk **B** □ Taping Reel  
 2). "- □□□": Reference code

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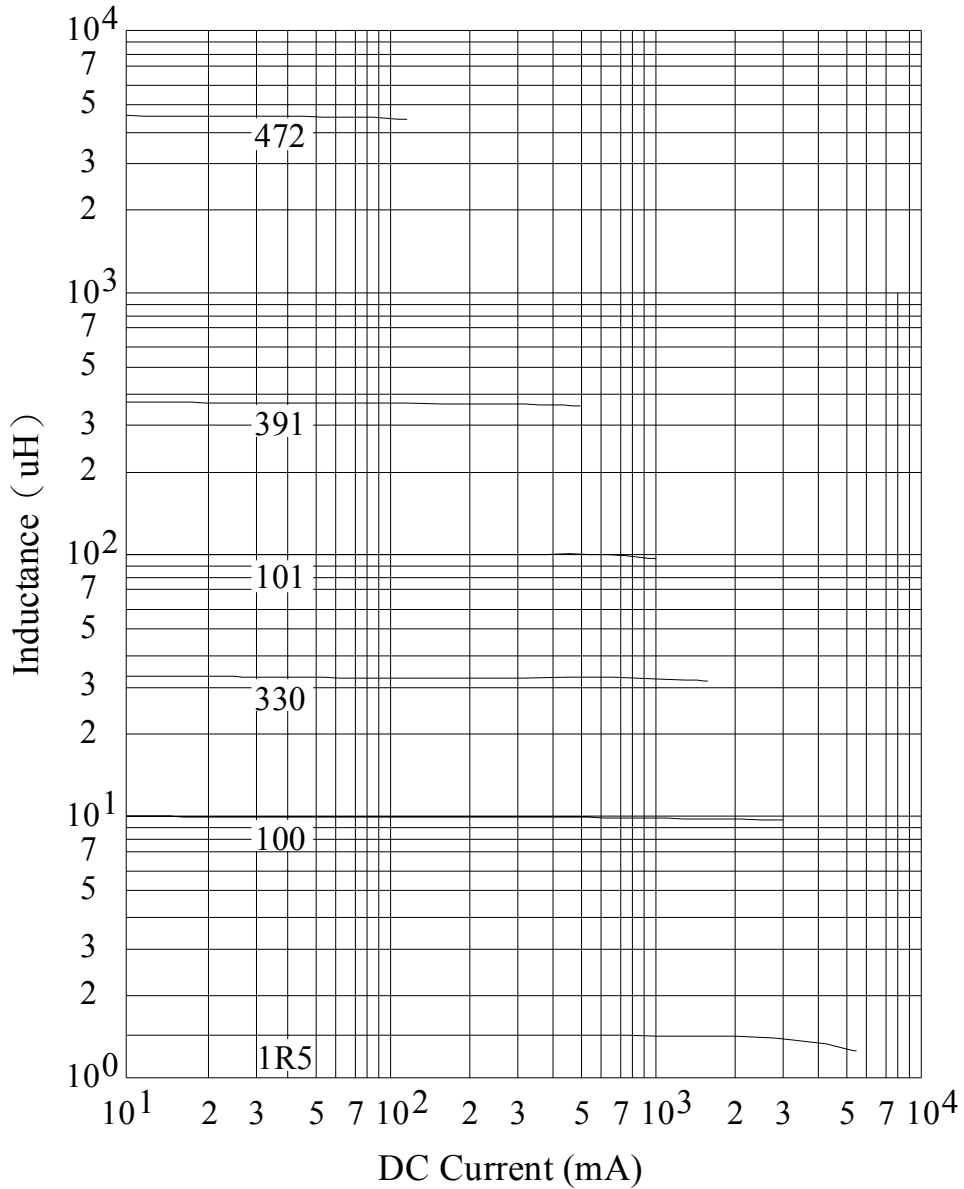
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VI . INDUCTANCE VS. DC CURRENT CURVE :



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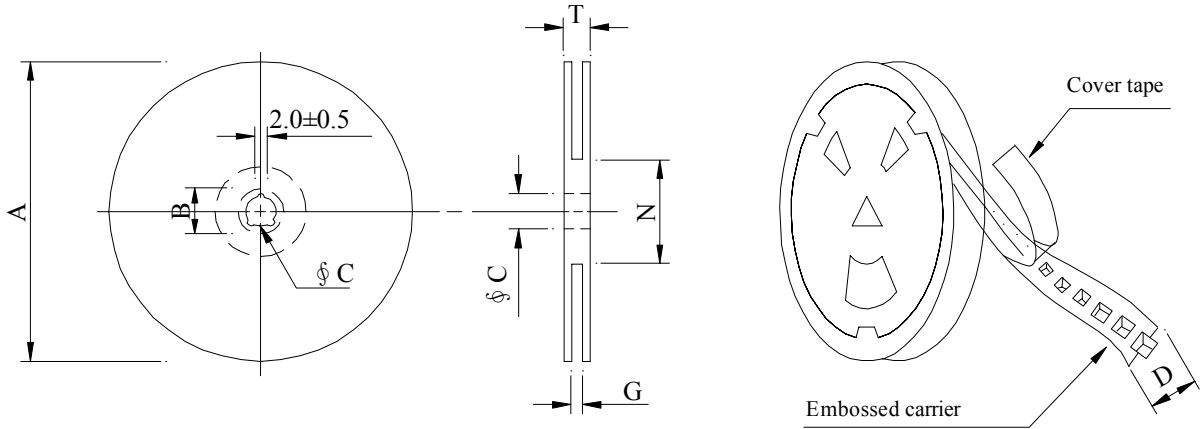
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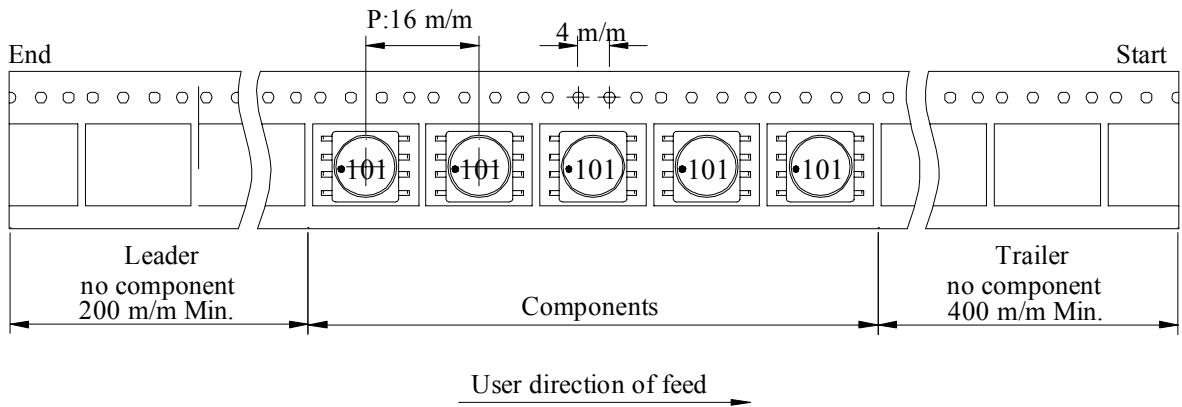
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|            |                                | ABC'S ITEM NO. |                  |

## VII . PACKAGING INFORMATION :

### ( 1 ) Configuration



※Carrier tape width : D



### ( 2 ) Dimensions

Unit:m/m

| Style   | A   | B      | C  | D  | G                | N                | T    |
|---------|-----|--------|----|----|------------------|------------------|------|
| 13 - 24 | 330 | 21±0.8 | 13 | 24 | 26 <sup>+0</sup> | 50 <sup>-0</sup> | 30.4 |

### ( 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)    |
| SS0908 | 400          | 1,600     | 13 - 24 | 1,600          | 8.6       | 40 x 40 x 24 |

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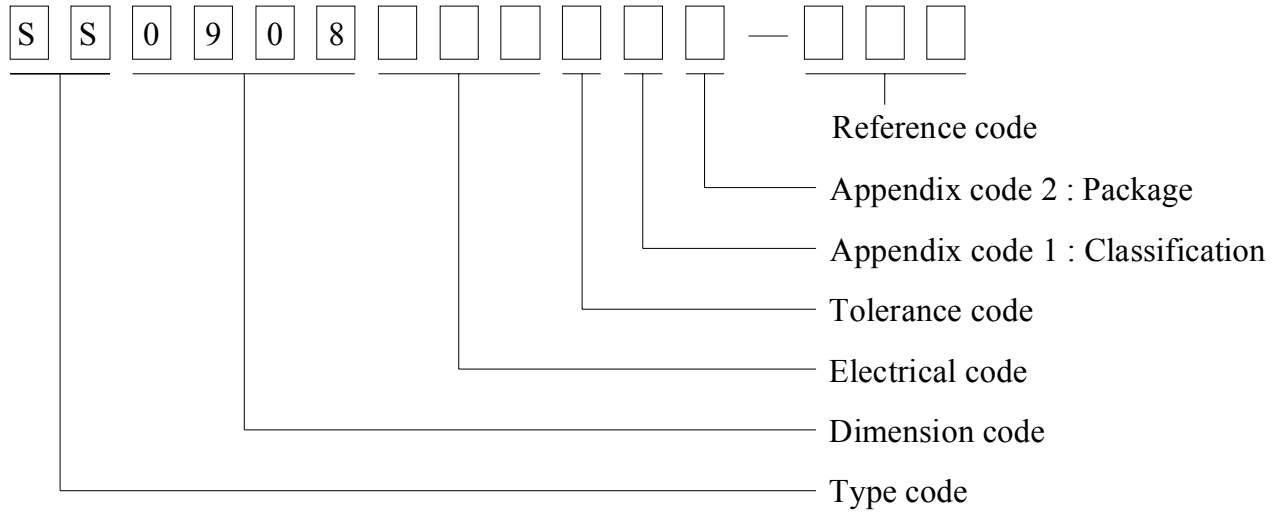
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|            |                                | ABC'S ITEM NO. |                  |

**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            |        |

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|---------------|--------------------------------|---------------------------------|------------------|

**IX . RELIABILITY TEST :**

| Test item                             | Specification   | Test condition  |                          |   |                        |                          |   |                       |
|---------------------------------------|---|---|--------------------------|---|------------------------|--------------------------|---|-----------------------|
| Solderability                         | More than 90% of the terminal electrode shall be covered With fresh solder. | Preheat : 150±25°C for 60 seconds<br>Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent<br>Solder temp. : 235±5°C<br>Flux : Rosin<br>Dip time : 4±1 seconds  |                          |   |                        |                          |   |                       |
| Thermal shock test<br>( Temp. cycle ) | Inductance shall not change more than ±20%                                  | <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Room temp.<br/>15 minutes</td> <td style="text-align: center;">→</td> <td style="text-align: center;">-25±2 °C<br/>30 minutes</td> </tr> <tr> <td style="text-align: center;">Room temp.<br/>15 minutes</td> <td style="text-align: center;">→</td> <td style="text-align: center;">85±2 °C<br/>30 minutes</td> </tr> </table> <p>Total : 50 cycles</p> | Room temp.<br>15 minutes | → | -25±2 °C<br>30 minutes | Room temp.<br>15 minutes | → | 85±2 °C<br>30 minutes |
| Room temp.<br>15 minutes              |   | →   | -25±2 °C<br>30 minutes   |   |                        |                          |   |                       |
| Room temp.<br>15 minutes              |   | →   | 85±2 °C<br>30 minutes    |   |                        |                          |   |                       |
| Humidity<br>Resistance test           |   | Temperature : 40±2°C<br>Humidity : 90 ~ 95%<br>Applied current : Per spec.<br>Time : 500 hours  |                          |   |                        |                          |   |                       |
| High temp.<br>Resistance test         | Temperature : 105±2°C<br>Applied current : Per spec.<br>Time : 500 hours    |   |                          |   |                        |                          |   |                       |

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|            |                                | 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        |
| LSFFW       | ---      | Polyurethane       | ---                | --- | MW79-C    | 155        |
| LSUEW       | ---      | 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        |

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

| 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 LZL  
LZ - Signifies magned 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 or 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.

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September 8, 2000

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