

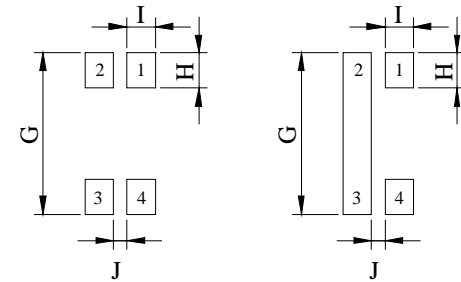
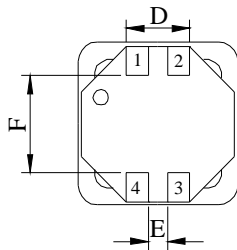
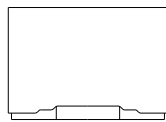
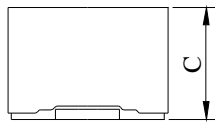
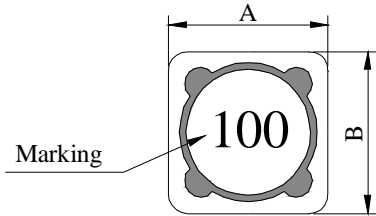
SPECIFICATION FOR APPROVAL

REF : 20111201-D

PAGE: 1

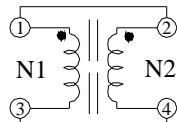
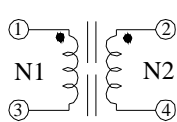
| | | | |
|-------|----------------|----------------|------------------|
| PROD. | SHIELDED SMD | ABC'S DWG NO. | SF1258□□□□L□-□□□ |
| NAME | POWER INDUCTOR | ABC'S ITEM NO. | |

I . CONFIGURATION & DIMENSIONS :

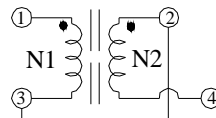


- A : 12.50 max. m/m
- B : 12.50 max. m/m
- C : 6.00 ±0.2 m/m
- D : 5.00 ±0.3 m/m
- E : 1.80 ±0.2 m/m
- F : 7.60 ±0.2 m/m
- G : 13.80 ref. m/m
- H : 3.85 ref. m/m
- I : 2.50 ref. m/m
- J : 0.50 ref. m/m

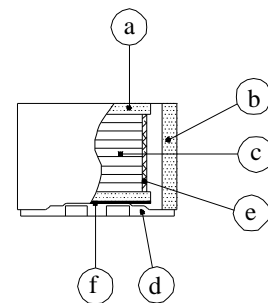
II . SCHEMATIC DIAGRAM :



PARALLEL



SERIES

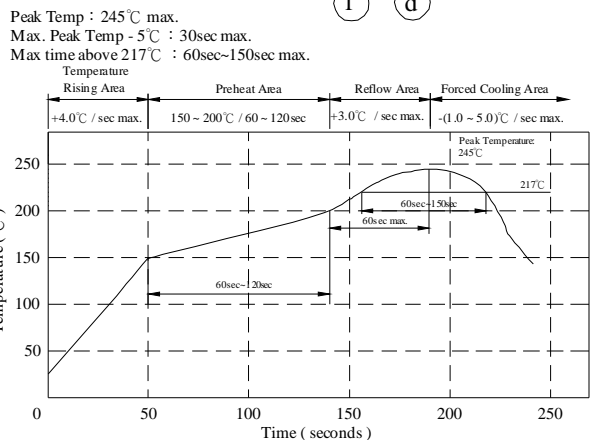


III . MATERIALS :

- a . Core : Ferrite DR core
- b . Core : Ferrite RI core
- c . Wire : Enamelled copper wire(class F & H)
- d . Base : LCP
- e . Terminal : Cu/Ni/Sn
- f . Adhesive : Epoxy resin
- g . Remark : Products comply with RoHS' requirements

IV . GENERAL SPECIFICATION :

- a . Storage temp. : -40°C ----+125°C
- b . Operating temp. : -40°C ----+125°C
(Temp. rise included)
- c . Resistance to solder heat : 245°C . 10 secs.



AR-001A

SPECIFICATION FOR APPROVAL

REF : 20111201-D

PAGE: 2

| | | | |
|-------|----------------|----------------|------------------|
| PROD. | SHIELDED SMD | ABC'S DWG NO. | SF1258□□□□L□-□□□ |
| NAME | POWER INDUCTOR | ABC'S ITEM NO. | |

V . ELECTRICAL CHARACTERISTICS :

| DWG No. | Parallel Ratings | | | | Series Ratings | | | |
|------------------|--------------------------|------------------------------|----------------------|---------------------|--------------------------|------------------------------|----------------------|---------------------|
| | Inductance (μ H) | RDC (m Ω) max. | Ipeak (A) typ. | Irms (A) typ. | Inductance (μ H) | RDC (m Ω) max. | Ipeak (A) typ. | Irms (A) typ. |
| SF1258R47YL□-□□□ | 0.47 \pm 30% | 5.3 | 33.00 | 17.60 | 1.824 \pm 30% | 21.2 | 16.500 | 8.800 |
| SF12581R0YL□-□□□ | 1.00 \pm 30% | 6.2 | 23.60 | 15.00 | 3.576 \pm 30% | 26.0 | 11.800 | 7.510 |
| SF12581R5YL□-□□□ | 1.50 \pm 30% | 7.3 | 18.30 | 13.80 | 5.912 \pm 30% | 30.2 | 9.150 | 6.890 |
| SF12582R2YL□-□□□ | 2.20 \pm 30% | 8.5 | 15.00 | 10.90 | 8.832 \pm 30% | 33.3 | 7.500 | 5.460 |
| SF12583R3YL□-□□□ | 3.30 \pm 30% | 10.1 | 12.70 | 9.26 | 12.340 \pm 30% | 37.2 | 6.350 | 4.630 |
| SF12584R7YL□-□□□ | 4.70 \pm 30% | 13.7 | 9.71 | 7.18 | 21.100 \pm 30% | 47.9 | 4.860 | 3.590 |
| SF12586R8YL□-□□□ | 6.80 \pm 30% | 18.6 | 8.68 | 6.64 | 26.350 \pm 30% | 67.2 | 4.340 | 3.320 |
| SF12588R2YL□-□□□ | 8.20 \pm 30% | 19.4 | 7.86 | 5.54 | 32.190 \pm 30% | 73.7 | 3.930 | 2.770 |
| SF1258100ML□-□□□ | 10.00 \pm 20% | 24.6 | 7.17 | 5.35 | 38.620 \pm 20% | 93.4 | 3.590 | 2.670 |
| SF1258150ML□-□□□ | 15.00 \pm 20% | 32.9 | 5.69 | 4.27 | 61.400 \pm 20% | 125.0 | 2.850 | 2.130 |
| SF1258220ML□-□□□ | 22.00 \pm 20% | 45.1 | 4.71 | 3.70 | 89.440 \pm 20% | 172.0 | 2.360 | 1.840 |
| SF1258330ML□-□□□ | 33.00 \pm 20% | 61.8 | 3.84 | 3.28 | 135.000 \pm 20% | 256.0 | 1.920 | 1.640 |
| SF1258470ML□-□□□ | 47.00 \pm 20% | 86.0 | 3.24 | 2.71 | 189.900 \pm 20% | 340.0 | 1.620 | 1.350 |
| SF1258680ML□-□□□ | 68.00 \pm 20% | 116.5 | 2.70 | 2.22 | 271.600 \pm 20% | 444.0 | 1.350 | 1.110 |
| SF1258820ML□-□□□ | 82.00 \pm 20% | 150.0 | 2.39 | 2.05 | 347.600 \pm 20% | 568.0 | 1.200 | 1.030 |
| SF1258101ML□-□□□ | 100.00 \pm 20% | 171.3 | 2.20 | 1.78 | 410.800 \pm 20% | 656.0 | 1.100 | 0.892 |
| SF1258151ML□-□□□ | 150.00 \pm 20% | 253.8 | 1.81 | 1.48 | 604.400 \pm 20% | 972.0 | 0.905 | 0.739 |
| SF1258221ML□-□□□ | 220.00 \pm 20% | 354.0 | 1.51 | 1.19 | 867.200 \pm 20% | 1416.0 | 0.755 | 0.594 |
| SF1258331ML□-□□□ | 330.00 \pm 20% | 574.0 | 1.22 | 1.06 | 1330.000 \pm 20% | 2290.0 | 0.610 | 0.530 |
| SF1258471ML□-□□□ | 470.00 \pm 20% | 830.0 | 1.02 | 0.87 | 1892.000 \pm 20% | 3197.0 | 0.510 | 0.434 |
| SF1258681ML□-□□□ | 680.00 \pm 20% | 1212.0 | 0.85 | 0.70 | 2719.000 \pm 20% | 4635.0 | 0.425 | 0.350 |
| SF1258821ML□-□□□ | 820.00 \pm 20% | 1460.0 | 0.77 | 0.60 | 3312.000 \pm 20% | 5363.0 | 0.385 | 0.301 |
| SF1258102ML□-□□□ | 1000.00 \pm 20% | 1854.0 | 0.70 | 0.57 | 4032.000 \pm 20% | 6782.0 | 0.350 | 0.283 |

- 1). □ : Packaging Information... Bulk Taping Reel
- 2). Inductance test freq. : 100KHz / 0.25V
- 3). Irms base on temp. rise 40°C typ.
- 4). Ipeak base on $\Delta L/L0A=30\%$ typ.
(Approximately peak current at short time is 30% typ.)

SPECIFICATION FOR APPROVAL

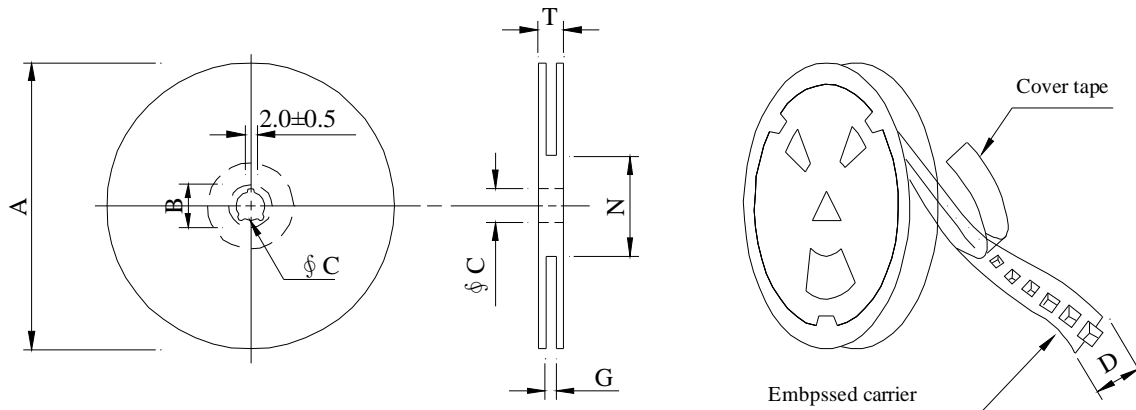
REF : 20111201-D

PAGE: 3

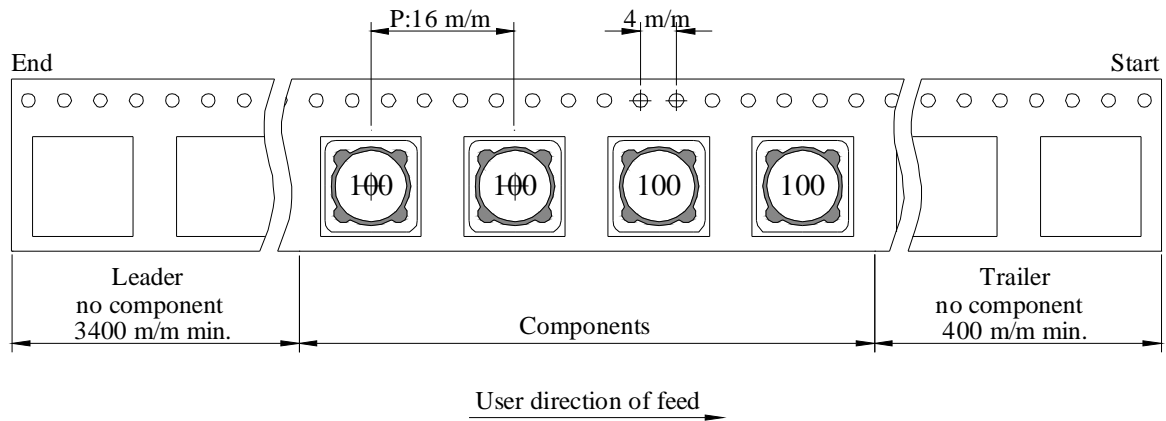
| | | | |
|------------|--------------------------------|----------------|------------------|
| PROD. NAME | SHIELDED SMD POWER INDUCTOR | ABC'S DWG NO. | SF1258□□□□L□-□□□ |
| | | ABC'S ITEM NO. | |

VI . PACKAGING INFORMATION :

(1) Configuration



※Carrier tape width : D



(2) Dimensions

Unit:m/m

| Style | A | B | C | D | G | N | T |
|---------|-----|--------|--------|----|------------------|------------------|------|
| 13 - 24 | 330 | 21±0.8 | 13±0.5 | 24 | 26 ⁺⁰ | 50 ⁻⁰ | 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) |
| SF1258 | 400 | 1,500 | 13 - 24 | 1,600 | 7.50 | 38 x 37 x 22 |

AR-001A

SPECIFICATION FOR APPROVAL

REF : 20111201-D

PAGE: 5

| | | | |
|-------|----------------|----------------|------------------|
| PROD. | SHIELDED SMD | ABC'S DWG NO. | SF1258□□□□L□-□□□ |
| NAME | POWER INDUCTOR | ABC'S ITEM NO. | |

VIII . 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;">+125 °C 30 minutes</td> </tr> </table> <p>Total : 50 cycles</p> | Room temp. 15 minutes | → | -40 °C 30 minutes | Room temp. 15 minutes | → | +125 °C 30 minutes |
| Room temp. 15 minutes | → | -40 °C 30 minutes | | | | | | |
| Room temp. 15 minutes | → | +125 °C 30 minutes | | | | | | |
| Humidity test | | Temperature : 40±2°C Humidity : 90±5% Time : 1000 hours | | | | | | |
| High temp. Resistance test | | Temperature : 125±5°C Applied current : Per spec. Time : 96 hours | | | | | | |

SPECIFICATION FOR APPROVAL

REF : 20111201-D

PAGE: 6

| | | | |
|---------------|------------------------------------|----------------|-----------------|
| PROD. NAME | SHIELDED SMD POWER INDUCTOR | ABC'S DWG NO. | SF1258□□□□L□-□□ |
| | | ABC'S ITEM NO. | |

IX . 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 |

287806002 Page 1 of 2 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 magnd wires twisted together; EL - signifies base coated magnet wire laid parallel with top coat applied overall; LZL - signi-
fies 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.

287806002 Page 2 of 2 OBMW2/E174837
September 8 , 2000

SPECIFICATION FOR APPROVAL

| | | | |
|---------------|--------------------------------|---------------------------------|------------------|
| PROD. NAME | SHIELDED SMD POWER INDUCTOR | ABC'S DWG NO. ABC'S ITEM NO. | SF1258□□□□L□-□□□ |
|---------------|--------------------------------|---------------------------------|------------------|

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 | | ANSI Typ | Temp Class |
|---------------|--------------|-----------------------------|-------|--------------|------------|
| | | BC | OC | | |
| Estersol 180 | E180 | Polyesterimide (solderable) | — | MW-77 | 180 |
| Amldester 200 | A200 | Polyesterimide | — | MW-74 | 200 |
| Polysol-N 155 | PN155 | Polyurethane | Nylon | MW-80, MW-28 | 155, 130 |
| Polysol 155 | P155, G155 | Polyurethane | — | MW-79, MW-75 | 155, 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 |
| 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.

SUMITOMO CHEMICAL CO LTD E54705 (M)
 5-33 KITAHAMA 4-CHOME CHUO-KO, OSAKA JAPAN

| Mtl Dsg | Col | Min Thk mm | UL94 Flame Class | Elec | RTI | | H W I | H A I | H V T R | D 4 5 | C T I |
|---|--------------|------------|------------------|------|---------------|---------|-------|-------|---------|-------|-------|
| | | | | | Mech with Imp | w/o Imp | | | | | |
| Liquid crystal polyester (LCP), designated "EKONOL" or "SUMIKASUPER", furnished in the form of pellets, (Contd) | | | | | | | | | | | |
| E4008 , E400X | NC , BK | 0.30 | 94V-0 | 130 | 130 | 130 | — | — | — | — | — |
| | | 0.75 | 94V-0 | 130 | 130 | 130 | 3 | 4 | — | — | — |
| | | 1.5 | 94V-0 | 130 | 130 | 130 | 2 | 4 | — | — | — |
| | | 3.0 | 94V-0 | 130 | 130 | 130 | 1 | 4 | 0 | 5 | 4 |
| E4008 | NC , WT , BK | 0.30 | 94V-0 | 130 | 130 | 130 | — | — | — | — | — |
| | | 0.75 | 94V-0 | 220 | 180 | 220 | 3 | 4 | — | — | — |
| | | 1.5 | 94V-0 | 220 | 200 | 240 | 2 | 4 | — | — | — |
| | | 3.0 | 94V-0 | 220 | 200 | 240 | 1 | 4 | 0 | 5 | 4 |
| E4010 | NC , BK | 0.30 | 94V-0 | 130 | 130 | 130 | — | — | — | — | — |
| | | 0.75 | 94V-0 | 220 | 180 | 220 | 3 | 4 | — | — | — |
| | | 1.5 | 94V-0 | 220 | 200 | 240 | 2 | 4 | — | — | — |
| | | 3.0 | 94V-0 | 220 | 200 | 240 | 1 | 4 | 0 | 5 | 4 |
| E400(Y)L , E4008L | NC , BK | 0.30 | 94V-0 | 130 | 130 | 130 | — | — | — | — | — |
| | | 0.75 | 94V-0 | 130 | 130 | 130 | 3 | 4 | — | — | — |
| | | 1.5 | 94V-0 | 130 | 130 | 130 | 2 | 4 | — | — | — |
| | | 3.0 | 94V-0 | 130 | 130 | 130 | 1 | 4 | 0 | 5 | 4 |
| E4810 | NC , BK | 0.30 | 94V-0 | 130 | 130 | 130 | — | — | — | — | — |
| | | 0.75 | 94V-0 | 130 | 130 | 130 | 0 | 4 | — | — | — |
| | | 1.5 | 94V-0 | 130 | 130 | 130 | 0 | 4 | — | — | — |
| | | 3.0 | 94V-0 | 130 | 130 | 130 | 1 | 4 | 0 | 5 | 4 |

(X) Denotes any number 1 thru 9.
 (Y) Denotes any number 1 thru 7.