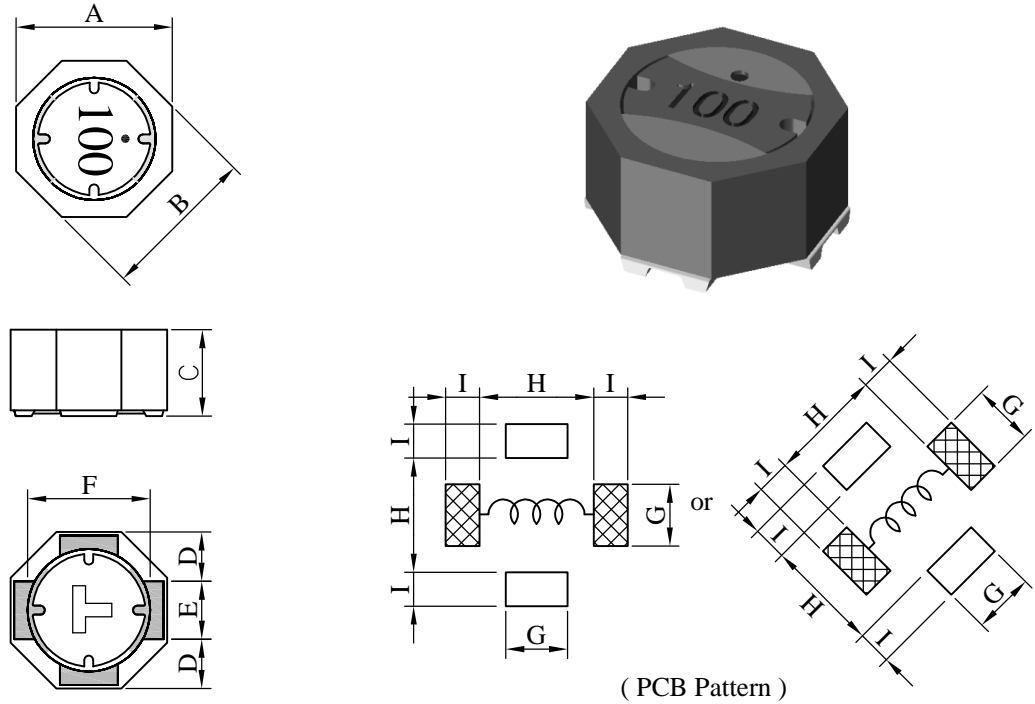


SPECIFICATION FOR APPROVAL

REF. :

| | | | | | | |
|---------------|-----------------------------|---------------|------------|------------------|---|--|
| PROD. NAME | Shielded SMD Power Inductor | ABC'S DWG NO. | | SU8045□□□□F□-□□□ | | |
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I . Configuration and dimensions :



Unit : m/m

| A | B | C | D | E | F | G | H | I |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 8.00 ±0.3 | 8.00 ±0.3 | 4.50 ±0.3 | 2.40 typ. | 3.20 typ. | 6.40 typ. | 3.40 ref. | 6.20 ref. | 1.40 ref. |

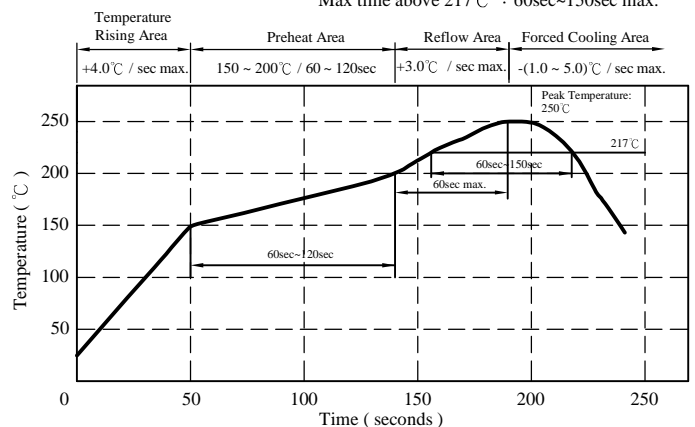
II . Description :

- a . Ferrite drum core construction.
- b . Magnetically shielded.
- c . Enamelled copper wire : F · H class
- d . Product weight : 1.0 g (ref.)
- e . Moisture sensitivity Level 1
- f . Products comply with RoHS' requirements
- g . Halogen free available

Peak Temp : 250°C max.
Max. Peak Temp - 5°C : 30sec max.
Max time above 217°C : 60sec~150sec max.

III . General specification :

- a . Storage temp. : -40°C ----+125°C
- b . Operating temp. : -40°C ----+125°C
(Temp. rise included.)
- c . Resistance to solder heat : 250°C.10 secs.



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SPECIFICATION FOR APPROVAL

REF. :

| | | | | | |
|------------|-----------------------------|---------------|------------------|------|---|
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IV . Electrical characteristics :

| DWG No. | Inductance (μ H) | Q ref. | Test Freq. (Hz) | | SRF (MHz) typ. | RDC (m Ω) | | Irms (A) | Isat (A) |
|------------------|--------------------------|-----------|----------------------|--------|------------------------|-----------------------|-------|---------------|---------------|
| | | | L | Q | | typ. | max. | | |
| SU80453R5YF□-□□□ | 3.5 \pm 30% | 12 | 100k | 7.96M | 45.0 | 18.8 | 25.0 | 5.00 | 5.00 |
| SU80454R7YF□-□□□ | 4.7 \pm 30% | 10 | 100k | 7.96M | 30.0 | 22.0 | 27.5 | 4.60 | 4.40 |
| SU80456R2YF□-□□□ | 6.2 \pm 30% | 10 | 100k | 7.96M | 23.0 | 28.5 | 36.0 | 4.20 | 3.80 |
| SU8045100YF□-□□□ | 10.0 \pm 30% | 16 | 100k | 2.52M | 18.0 | 35.0 | 48.0 | 3.50 | 3.30 |
| SU8045220YF□-□□□ | 22.0 \pm 30% | 18 | 100k | 2.52M | 12.0 | 94.0 | 122.0 | 2.25 | 2.15 |
| SU8045330YF□-□□□ | 33.0 \pm 30% | 14 | 100k | 2.52M | 8.0 | 118.0 | 150.0 | 2.00 | 1.80 |
| SU8045470YF□-□□□ | 47.0 \pm 30% | 12 | 100k | 2.52M | 6.0 | 215.0 | 270.0 | 1.45 | 1.40 |
| SU8045680YF□-□□□ | 68.0 \pm 30% | 8 | 100k | 2.52M | 4.0 | 320.0 | 400.0 | 1.25 | 1.20 |
| SU8045101YF□-□□□ | 100.0 \pm 30% | 20 | 100k | 0.796M | 3.0 | 400.0 | 500.0 | 1.00 | 0.92 |

- 1). □ : Packaging information : □ Code
- 2). "-□□□" : Reference code
- 3). Electrical specifications at 25°C
- 4). Inductance Test Freq. : 100kHz / 0.1V
- 5). Isat base on $\Delta L / L0A=35\%$ typ.
- 6). Irms base on Temp. rise 40°C typ.

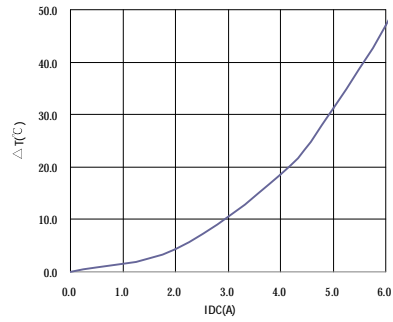
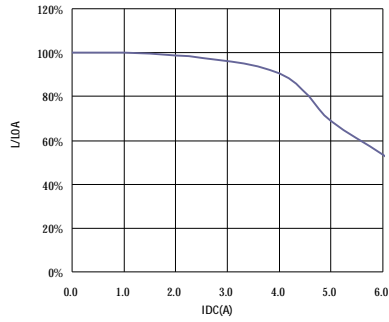
SPECIFICATION FOR APPROVAL

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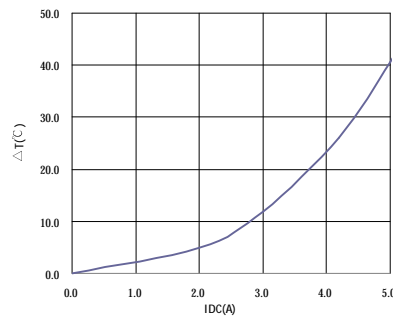
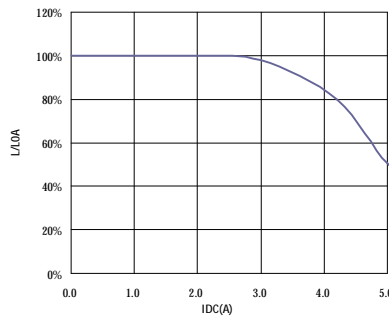
| | | | | | |
|---------------|-----------------------------|---------------|------------------|------|---|
| PROD. NAME | Shielded SMD Power Inductor | ABC'S DWG NO. | SU8045□□□□F□-□□□ | | |
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V . Curve :

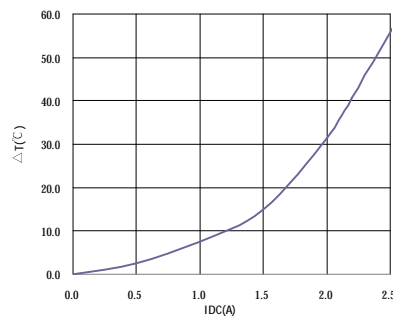
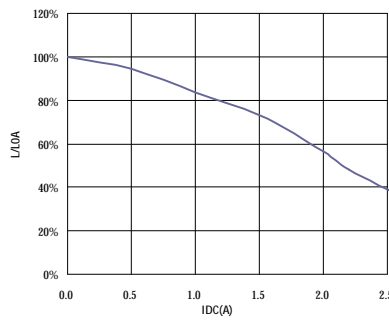
SU80453R5YF□



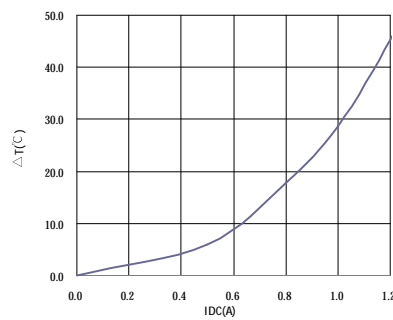
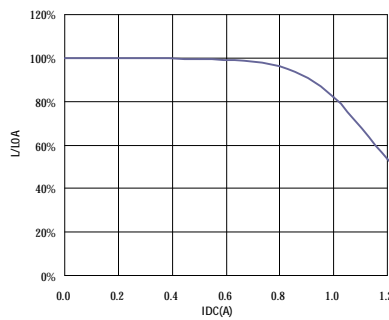
SU80456R2YF□



SU8045330YF□



SU8045101YF□



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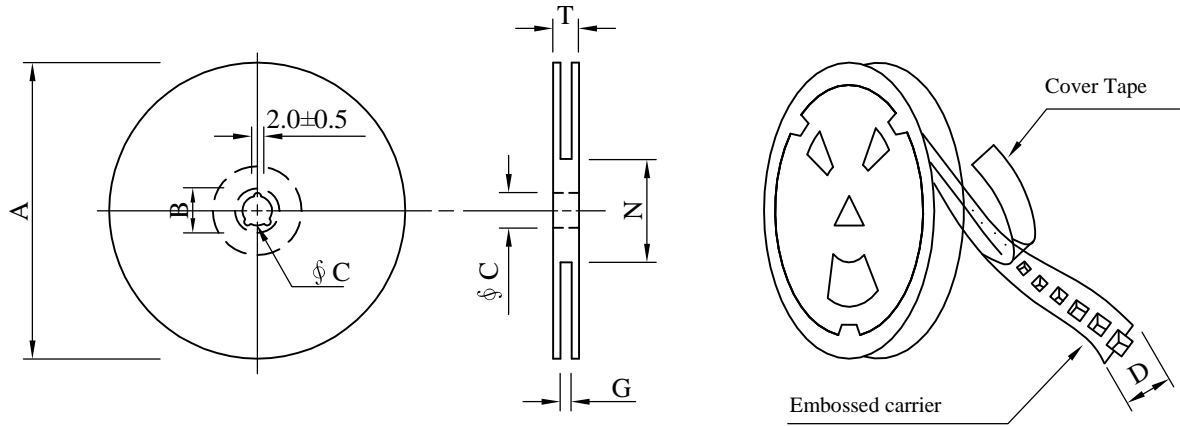
SPECIFICATION FOR APPROVAL

REF. :

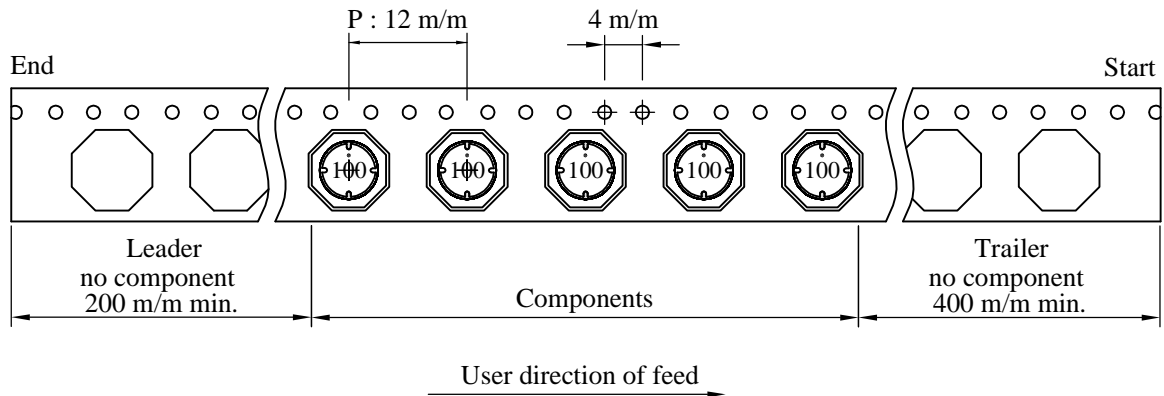
| | | | | | |
|------------|-----------------------------|---------------|------------------|------|---|
| PROD. NAME | Shielded SMD Power Inductor | ABC'S DWG NO. | SU8045□□□□F□-□□□ | | |
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VI . Packaging information :

(1) Configuration



※Carrier tape width : D



(2) Dimensions

Unit:m/m

| Style | A | B | C | D | G | N | T |
|---------|-----|--------|--------|----|------------------|------------------|------|
| 13 - 16 | 330 | 21±0.8 | 13±0.5 | 16 | 18 ⁺⁰ | 50 ⁻⁰ | 22.4 |

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

| Code | Inner : Reel | | | Outer : Carton | | |
|------|--------------|-----------|---------|----------------|-----------|--------------|
| | Q'TY (pcs) | G.W. (gw) | Style | Q'TY (pcs) | G.W. (Kg) | Size (cm) |
| B | 1,000 | 1450 | 13 - 16 | 6,000 | 10.0 | 38 x 37 x 22 |

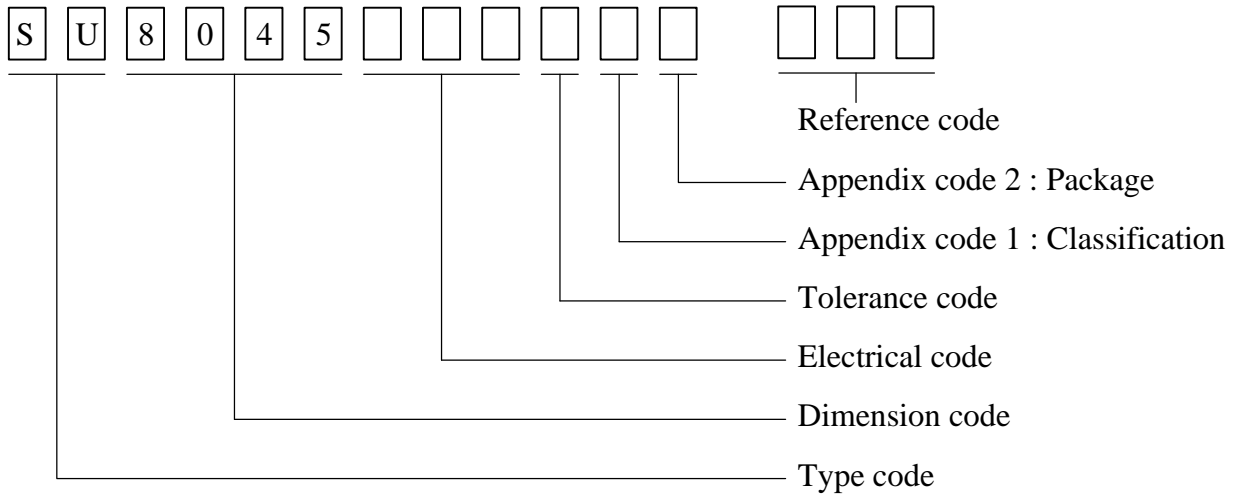
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SPECIFICATION FOR APPROVAL

REF. :

| | | | | | |
|------------|-----------------------------|---------------|------------------|------|---|
| PROD. NAME | Shielded SMD Power Inductor | ABC'S DWG NO. | SU8045□□□□F□-□□□ | | |
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VII . Drawing number expression :



Appendix code 1 : Product Classification

Appendix code 2 : Package Information

| Code | Inner package | Cover tape | Carrier tape | Bag | Package Q'TY | Remark |
|------|--------------------|------------|--------------|------------|--------------|--------|
| B | T/R (Reel package) | UCT | Antistatic | Antistatic | 1000 pcs | |

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REF. :

| | | | | | |
|------------|-----------------------------|---------------|------------------|------|---|
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VIII . Reliability test :

| Item | Reference documents | Test Condition | Test Specification |
|-------------------------------------|--|--|--|
| 1.High Temperature Exposure | MIL-STD-202 Method 108 | 1.Temperature: 125±2℃ 2.Time:96±2 hours. | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%. |
| 2.Temperature Cycling | JESD22-A 104 | 1.Temperature: -40℃ ~ +125℃ 2.Number of cycle:100 cycle 3.Dwell time:30 minutes | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%. |
| 3.Biased Humidity Test | MIL-STD-202 Method 103 | 1.Temperature : 85±2℃ 2.Humidity: 85% RH. 3.Time:96±2 Hours | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%. |
| 4.Operational Life | JESD22-A 108 | 1.Temperature: 125℃ (Temp. rise included) 2.Time:96±2 hours. 3.Rated current | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%. |
| 5.External Visual | JESD22-B 101 & MIL-STD-883 Method 2009 | Inspect product constructions, marking and workmanship. | 1.No pollution on the surface of products. 2.Clear marking. 3.No crack. |
| 6.Physical Dimensions | JESD22-B 100 | Verify physical dimensions to the applicable product detail specification. | Per product specification standard |
| 7.Resistance to solvents | MIL-STD-202 Method 215 | Immerse into solvent for 3±0.5 minutes & brush 10 times for 3 cycles. | 1.No body change in apperarence. 2.No marking blurred. 3.Inductance shall not change more than ±20%. |
| 8.Vibration Test | MIL-STD-202 Method 204 | 1.Frequency and Amplitued : 10-2000-10 Hz, 1.5 mm. 2.Direction:X, Y, Z 3.Test duration:2 hours for each direction, 6 hours in total. | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%. |
| 9.Resistance To Soldering Heat Test | MIL-STD-202 Method 210 & J-STD020D.1 | 1.Highest temperature : 250±5℃. 2.Time (temp. ≥ 217℃) : 60~150 Second. 3.IR reflow times : 3 times. | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%. |
| 10.Saturation Current | JIS C 6436 & User SPEC. | 1.Applied rated current for 5 second. 2.Saturation current | Inductance shall not drop more than 35% typ. |
| 11.Over load | JIS C 6436 & User SPEC. | 1.Applied one and half rated current for a period of 5 minutes. 2.Rated current | No electrical or mechanical damage |
| 12.Temperature Rise Current | JIS C 6436 & User SPEC. | 1.Applied rated current for 10 minutes. 2.Temperature measure by digital surface thermometer. 3.Irms current | Surface temperature rise is less than 40℃ typ. |
| 13.Solderability Test | J-STD-002 & JESD22-B 102 | 1.Baking in pre-testing : 150±5℃ / 16Hours±30 min. 2.Peak temperature : 240±5℃ 3.Time (temp. ≥ 217℃) : 60~150 second. 4.IR reflow times : 1 times. | More than 95% soldering coverage min on terminations. |
| 14.Electrical Characteriazation | MIL-STD-202 Method 304 & User SPEC. | 1.Operating temperature : -40℃~125℃ 2.Room temperature : 25℃. | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%. |
| 15.Drop | CNS-C6354 & GB/T 2423.8 | 1.Products shall be mounted on SPEC. PCB and dropped down from a height of 1m 2.Drop total time : 6 time (Every side of sample drop 2 time) | 1. Adhesion on PCB shall be enough. 2. Product appearance shall not break. 3. No electrical damage. |
| 16.Terminal Strength Test | IEC 60068-2-21 | 1.Apply push force to samples mounted on PCB. 2.Force of 1.8 kg for 60±1 seconds. | After test, inductors shall be no mechanical damage. |

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