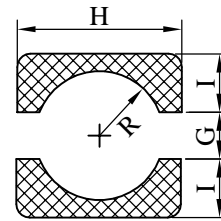
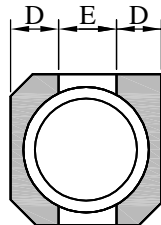
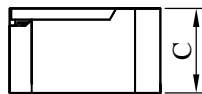
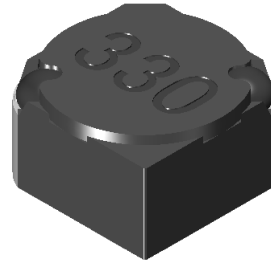
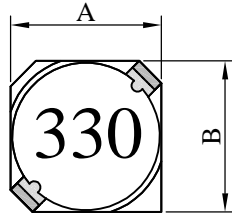


SPECIFICATION FOR APPROVAL

REF. :

| | | | | | | |
|---------------|-----------------------------|---------------|------------|------------------|---|--|
| PROD. NAME | Shielded SMD Power Inductor | ABC'S DWG NO. | | DH6038□□□□F□-□□□ | | |
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I . Configuration and dimensions :



(PCB Pattern)

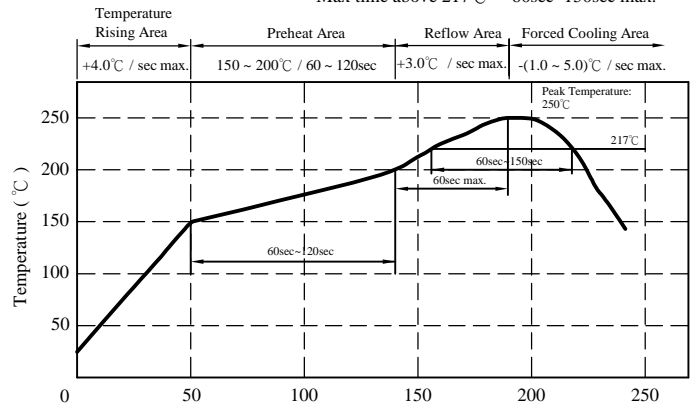
Unit : m/m

| A | B | C | D | E | G | H | I | R |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 6.70 ±0.3 | 6.70 ±0.3 | 4.00 max. | 2.10 typ. | 2.50 typ. | 2.40 ref. | 7.30 ref. | 2.40 ref. | 3.00 ref. |

II . Description :

- a . Ferrite drum core construction.
- b . Magnetically shielded.
- c . Enamelled copper wire : F class
- d . Product weight : 0.60g (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. :

| | | | | | |
|---------------|-----------------------------|---------------|------------------|------|---|
| PROD. NAME | Shielded SMD Power Inductor | ABC'S DWG NO. | DH6038□□□□F□-□□□ | | |
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IV . Electrical characteristics :

| DWG No. | Inductance (μH) | RDC mΩ | | Rated current (A) |
|------------------|----------------------|--------|------|------------------------|
| | | typ. | max. | |
| DH60381R0YF□-□□□ | 1.0±30 % | 9.8 | 15 | 5.00 |
| DH60383R0YF□-□□□ | 3.0±30 % | 15.3 | 21 | 3.50 |
| DH60385R0YF□-□□□ | 5.0±30 % | 18.4 | 25 | 2.90 |
| DH60386R8YF□-□□□ | 6.8±30 % | 22.3 | 30 | 2.50 |
| DH60388R2YF□-□□□ | 8.2±30 % | 26.6 | 36 | 2.30 |
| DH6038100MF□-□□□ | 10.0±20 % | 35.8 | 50 | 2.00 |
| DH6038120MF□-□□□ | 12.0±20 % | 39.7 | 55 | 1.70 |
| DH6038150MF□-□□□ | 15.0±20 % | 42.8 | 60 | 1.60 |
| DH6038180MF□-□□□ | 18.0±20 % | 55.1 | 75 | 1.50 |
| DH6038220MF□-□□□ | 22.0±20 % | 64.7 | 87 | 1.30 |
| DH6038270MF□-□□□ | 27.0±20 % | 76.9 | 105 | 1.20 |
| DH6038330MF□-□□□ | 33.0±20 % | 90.3 | 120 | 1.10 |
| DH6038390MF□-□□□ | 39.0±20 % | 103.0 | 135 | 1.00 |
| DH6038470MF□-□□□ | 47.0±20 % | 123.0 | 160 | 0.95 |
| DH6038560MF□-□□□ | 56.0±20 % | 149.0 | 190 | 0.86 |
| DH6038680MF□-□□□ | 68.0±20 % | 187.0 | 240 | 0.75 |
| DH6038820MF□-□□□ | 82.0±20 % | 220.0 | 290 | 0.70 |
| DH6038101MF□-□□□ | 100.0±20 % | 266.0 | 345 | 0.65 |

- 1). □ : Packaging information : □ Code
- 2). "-□□□" : Reference code
- 3). Electrical specifications at 25°C
- 4). Inductance Test Condition. : 10kHz / 1V
- 5). Rated current: It is either the inductance is 35% lower than its nominal value in D.C. saturation characteristics or temperature raise becomes ΔT=30 °C ref.

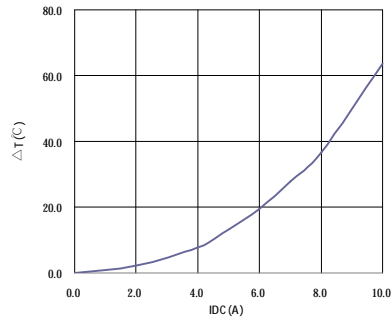
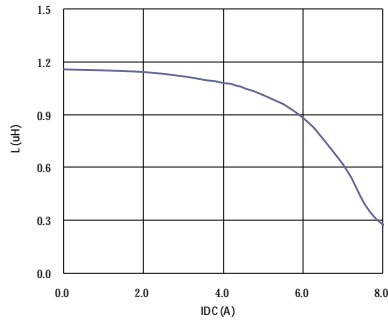
SPECIFICATION FOR APPROVAL

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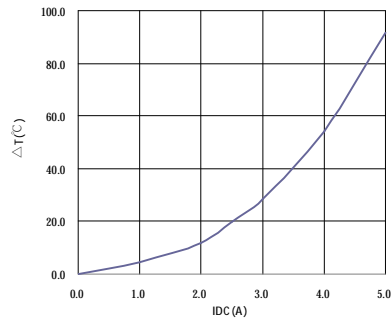
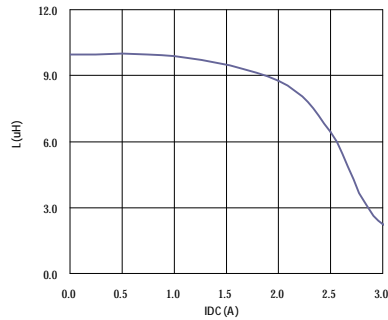
| | | | | | |
|---------------|-----------------------------|---------------|------------------|------|---|
| PROD. NAME | Shielded SMD Power Inductor | ABC'S DWG NO. | DH6038□□□□F□-□□□ | | |
| | | REV. | 20150824-D | PAGE | 3 |

V . Curve :

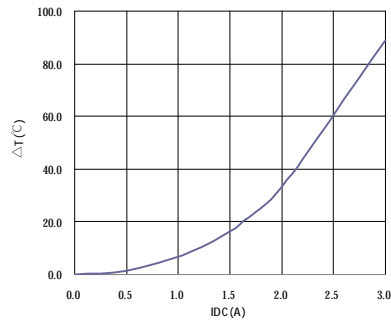
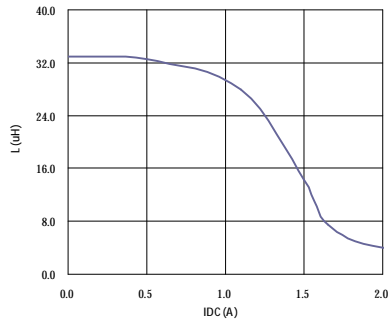
DH60381R0YF□



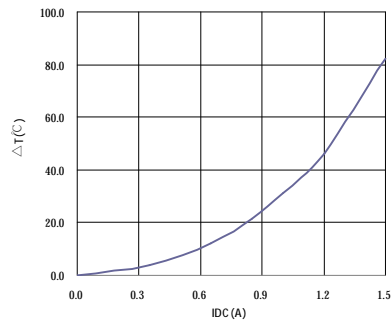
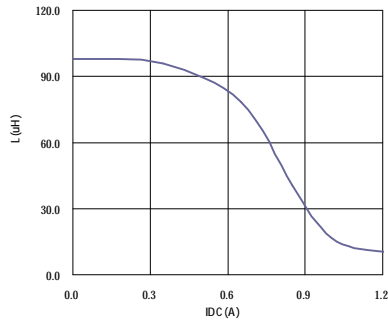
DH6038100MF□



DH6038330MF□



DH6038101MF□



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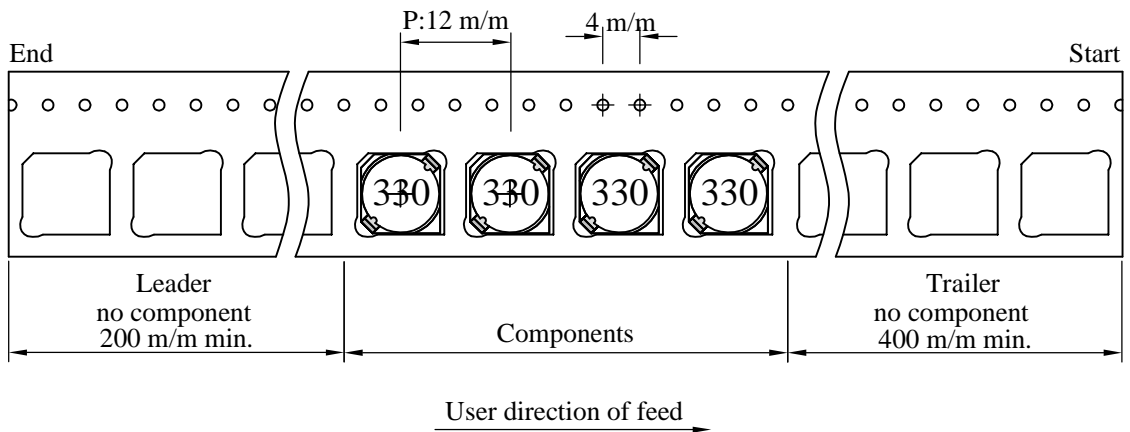
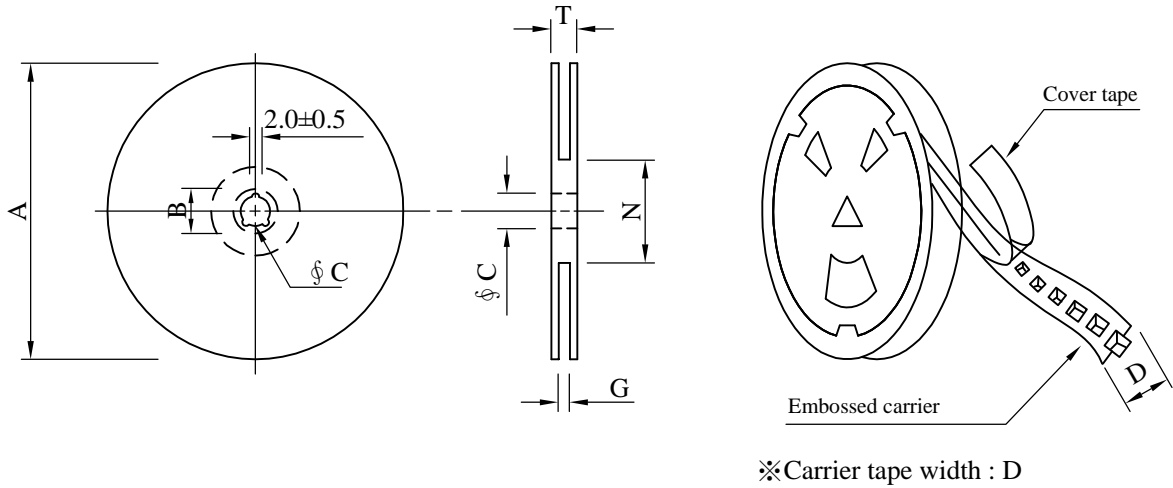
SPECIFICATION FOR APPROVAL

REF. :

| | | | | | |
|------------|-----------------------------|---------------|------------------|------|---|
| PROD. NAME | Shielded SMD Power Inductor | ABC'S DWG NO. | DH6038□□□□F□-□□□ | | |
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VI . Packaging information :

(1) Configuration



(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 | 1040 | 13 - 16 | 6,000 | 7.5 | 38 x 37 x 22 |

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SPECIFICATION FOR APPROVAL

REF. :

| | | | | | |
|------------|-----------------------------|---------------|------------------|------|---|
| PROD. NAME | Shielded SMD Power Inductor | ABC'S DWG NO. | DH6038□□□□F□-□□□ | | |
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VII . Reliability test :

| Item | Reference documents | Test Condition | Test Specification |
|-------------------------------------|--|---|---|
| 1.High Temperature Exposure | MIL-STD-202 Method 108 | 1.Temperature: 125±2°C 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°C ~ +125°C 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 °C 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°C (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 appearance. 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°C. 2.Time (temp. ≥ 217°C) : 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 30°C typ. |
| 13.Solderability Test | J-STD-002 & JESD22-B 102 | 1.Baking in pre-testing : 150±5°C / 16Hours±30 min. 2.Peak temperature : 240±5°C 3.Time (temp. ≥ 217°C) : 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°C~125°C 2.Room temperature : 25°C . | 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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