

LOW PROFILE SHIELDED SMD CHIP POWER INDUCTOR



6.0 x 6.0 x 2.0mm

ASPI-0615FS



RoHS/RoHS II Compliant

FEATURES:

- Small size and low profile: 2.0mm
- Small DCR and high rated current
- High reliability to mechanical strength
- Magnetically shielded by magnetic powder molding
- Suitable for RoHS reflow profile

APPLICATIONS:

- DC/DC converter for LCD display of notebook PC
- Portable communication equipment
- Digital cameras

ELECTRICAL SPECIFICATIONS:

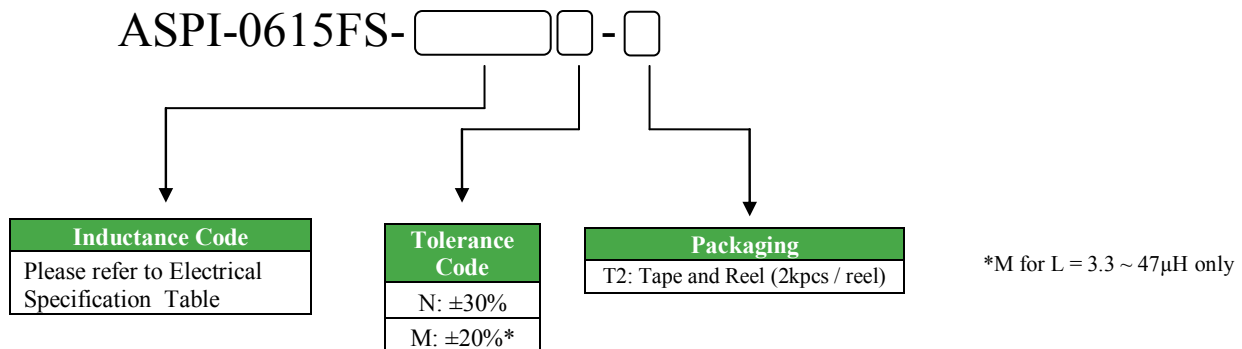
| | |
|------------------------------------|---|
| Abracon P/N: | ASPI-0615FS Series |
| Operating Temperature & Humidity : | -25°C to +120°C (Including self generated heat) |
| Storage Temperature & Humidity: | -10°C to +40°C, 30% to 70% RH |

| Part Number ASPI-0615FS- Inductance Code | Inductance | Inductance Tolerance | DCR | DCR Tolerance | Saturation Current | Temperature Rise Current |
|--|------------|-------------------------|-----|------------------|-----------------------|-----------------------------|
| Units | μH | % | mΩ | % | A | A |
| Symbol | L | M, N | DCR | | Isat | Irms |
| ASPI-0615FS-R50 | 0.5 | N | 9 | ±30% | 7.00 | 5.20 |
| ASPI-0615FS-R80 | 0.8 | N | 12 | | 6.00 | 4.10 |
| ASPI-0615FS-1R5 | 1.5 | N | 17 | | 4.00 | 3.60 |
| ASPI-0615FS-2R2 | 2.2 | N | 24 | | 3.50 | 2.90 |
| ASPI-0615FS-3R3 | 3.3 | M, N | 30 | | 2.80 | 2.80 |
| ASPI-0615FS-4R7 | 4.7 | M, N | 43 | ±20% | 2.40 | 2.20 |
| ASPI-0615FS-5R6 | 5.6 | M, N | 55 | | 2.20 | 2.00 |
| ASPI-0615FS-6R8 | 6.8 | M, N | 60 | | 2.00 | 1.80 |
| ASPI-0615FS-100 | 10 | M, N | 90 | | 1.90 | 1.50 |
| ASPI-0615FS-150 | 15 | M, N | 120 | | 1.30 | 1.20 |
| ASPI-0615FS-220 | 22 | M, N | 170 | | 1.10 | 1.00 |
| ASPI-0615FS-330 | 33 | M, N | 310 | | 0.90 | 0.90 |
| ASPI-0615FS-470 | 47 | M, N | 370 | 0.80 | 0.80 | |

Test Conditions

1. Inductance is measured in HP-4285A Precision LCR Meter.
2. RDC is measured in DU-5011 milli ohm meter.(or equivalent).
3. Isat : Based on inductance change ($\Delta L/L_o : \leq -30\%$)
4. Irms : Based on temperature rise ($\Delta T : 40^\circ\text{C TYP.}$)
5. Test Freq: 100KHz, 1Vrms

OPTIONS AND PART IDENTIFICATION



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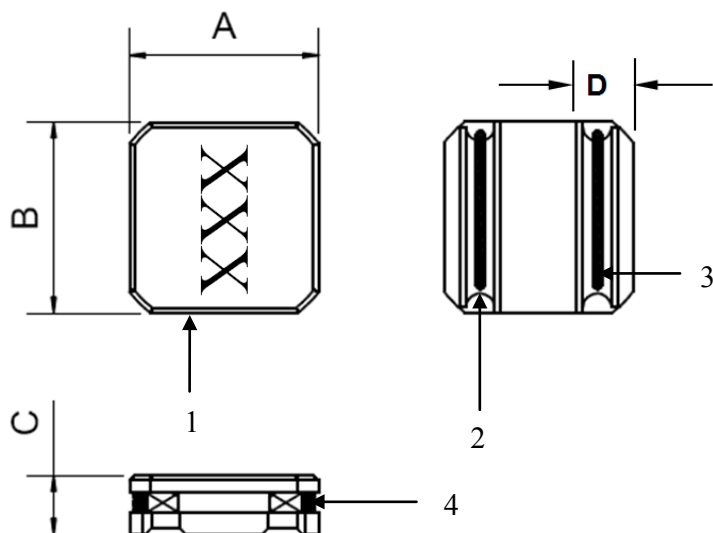


6.0 x 6.0 x 2.0mm

OUTLINE DRAWING:

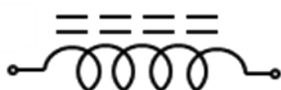
Mechanical Dimensions (Effective date: 2/15/2012)

Please contact Abracon for products purchased before effective date. Package outline is different due to core material change.



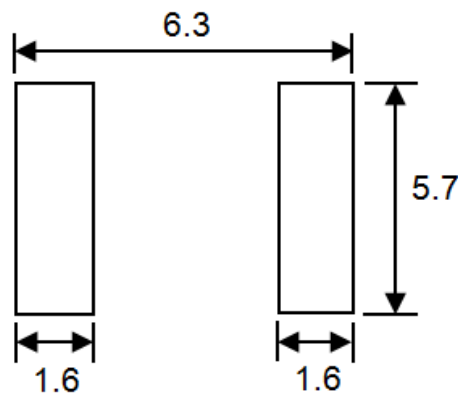
| A | B | C | D Typ. |
|---------|---------|---------|--------|
| 6.0±0.2 | 6.0±0.2 | 2.0±0.2 | 1.50 |

Circuit Schematic



No Polarity

Recommended Land Pattern



Dimension: mm

Material

| No | Part Name | Material |
|----|-----------------|--------------------|
| 1 | Ferrite core | Ni-Zn Ferrite |
| 2 | Terminals | Ag/Ni/Sn |
| 3 | Coil | Cu/P180 Grd 1 |
| 4 | Adhesive | Silicon Base Resin |
| | Magnetic Powder | Ni-Zn Ferrite |

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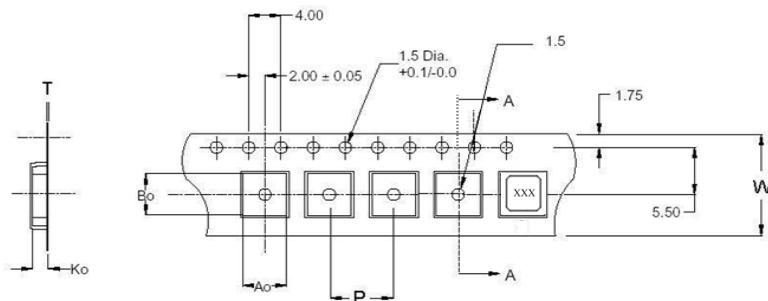
RoHS/RoHS II Compliant



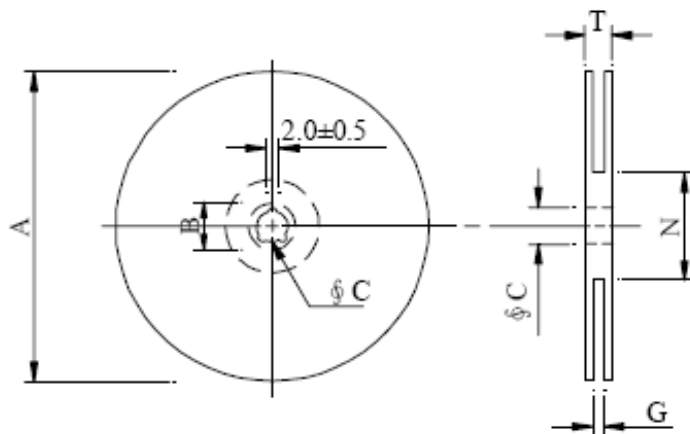
6.0 x 6.0 x 2.0mm

TAPE & REEL:

T2: 2,000pcs / reel



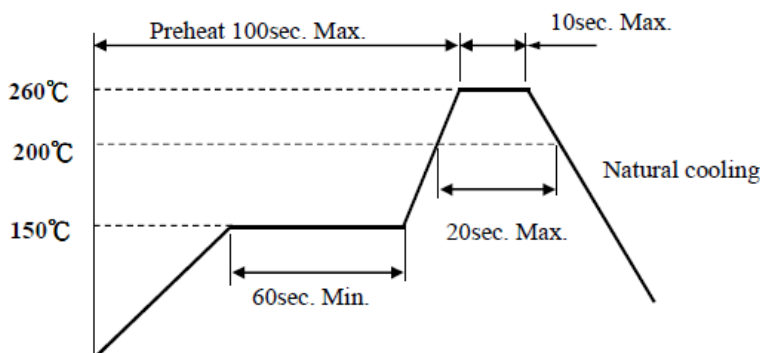
| | |
|----|-------|
| Ao | 6.35 |
| Bo | 6.20 |
| Ko | 2.40 |
| W | 16.00 |
| P | 12.00 |
| T | 0.40 |



| | |
|---|----------|
| A | 330 |
| B | 21.0±0.8 |
| C | 13.5±0.5 |
| G | 16.6 |
| N | 99.5 |
| T | 21 |

Dimension: mm

REFLOW PROFILE:



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