

LOW PROFILE SHIELDED SMD POWER INDUCTORS



ASPI-104S



RoHS
Compliant

FEATURES:

- Superior to be high saturation for high density surface mounting
- High energy storage and Low resistance to keep power loss minimum
- Magnetically shielded with ferrite core for low radiation
- Mighty temperature deflection prevents damage during solder reflection

APPLICATIONS:

- Desktop, notebook, servers
- Network hubs, bridges, routers
- XDSL, PBX base stations
- Power source circuits, DC/DC converters, DC/AC inverters
- Digital TV, DVD, Modem, setup box
- Battery charger

STANDARD SPECIFICATIONS:

PARAMETERS

| | |
|------------------------|----------------------|
| ABRACON P/N: | ASPI-104S xxx Series |
| Operating temperature: | -40°C to +85°C |
| Storage temperature: | -40°C to +85°C |

| Abracon Part Number | L (μH) | Tolerance % | R _{DC} (Ω) Max | I _{sat} (A) Max | I _{rms} (A) Max |
|---------------------|--------|-------------|----------------------------|-----------------------------|-----------------------------|
| ASPI-104S-7R0 | 7.0 | K, M | 0.027 0 | 4.80 | 4.50 |
| ASPI-104S-100 | 10 | K, M | 0.035 0 | 4.40 | 3.80 |
| ASPI-104S-150 | 15.0 | K, M | 0.050 0 | 3.60 | 3.10 |
| ASPI-104S-180 | 18.0 | K, M | 0.065 6 | 2.70 | 3.20 |
| ASPI-104S-220 | 22 | K, M | 0.073 0 | 2.90 | 2.50 |
| ASPI-104S-270 | 27 | K, M | 0.093 0 | 2.30 | 2.30 |
| ASPI-104S-330 | 33 | K, M | 0.093 0 | 2.30 | 2.20 |
| ASPI-104S-470 | 47 | K, M | 0.135 6 | 2.10 | 1.90 |
| ASPI-104S-680 | 68 | K, M | 0.213 0 | 1.50 | 1.42 |
| ASPI-104S-101 | 100 | K, M | 0.304 0 | 1.35 | 1.25 |
| ASPI-104S-121 | 120 | K, M | 0.350 0 | 1.20 | 1.08 |
| ASPI-104S-151 | 150 | K, M | 0.506 0 | 1.15 | 0.85 |
| ASPI-104S-181 | 180 | K, M | 0.663 0 | 1.05 | 0.70 |
| ASPI-104S-221 | 220 | K, M | 0.756 0 | 0.92 | 0.70 |
| ASPI-104S-331 | 330 | K, M | 1.090 0 | 0.70 | 0.52 |
| ASPI-104S-471 | 470 | K, M | 1.610 0 | 0.60 | 0.50 |

Test Condition

- * Test Frequency is 100KHz,0.1V
- * Tolerance: K= ±10%; M= ±20%
- * Inductance drop 35% at Isat
- * Temperature rise 3 0°C at I_{rms}

OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

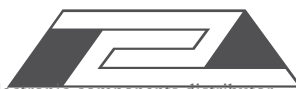
ASPI-104S - [] [] - []

| Inductance Code |
|-------------------------------------|
| Please refer to the table in Page 2 |

| Tolerance |
|-----------|
| K: ±10% |
| M: ±20% |

| Packaging |
|------------------|
| Blank: Bulk |
| T: Tape and Reel |

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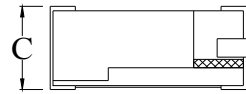
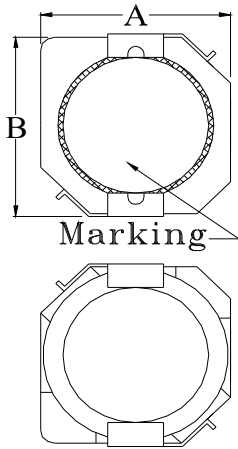
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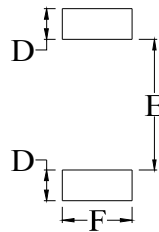
ASPI-104S

RoHS Compliant

OUTLINE DIMENSIONS:



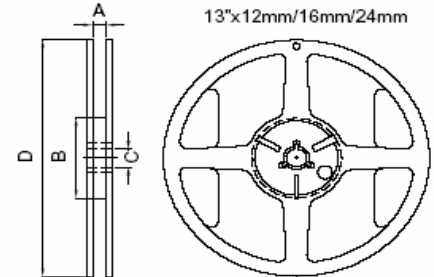
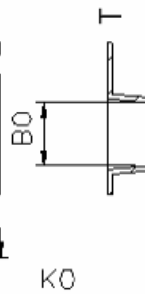
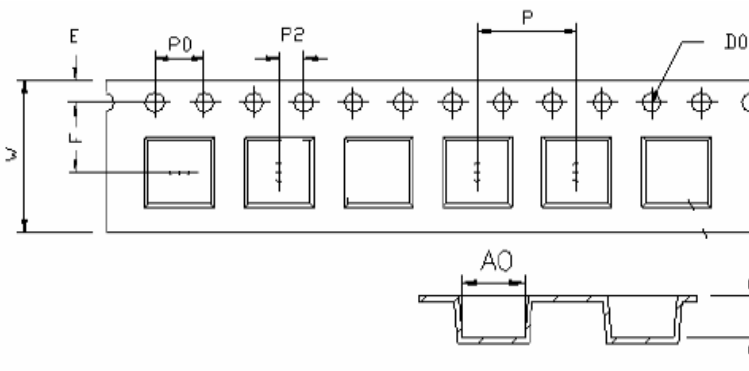
LAND PATTERNS (mm)



| Part# | A | B | C | D | E | F |
|---------------|-------------------------|---------------------------|--------------------------|---------------------|---------------------|---------------------|
| ASPI-104S-xxx | 0.394+0.012 (10+0.3) | 0.398+0.012 (10.1+0.3) | 0.150+0.008 (3.8+0.2) | 0.067 (1.7 ref.) | 0.287 (7.3 ref.) | 0.142 (3.6 ref.) |

Dimension : Inches (mm)

TAPE & REEL

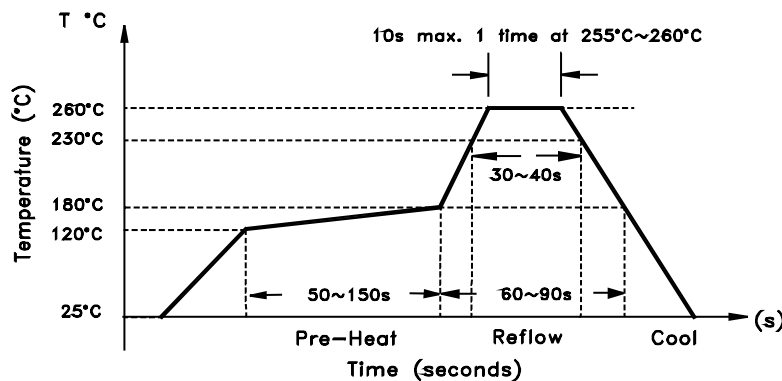


| | | | | | |
|---------------|----------|----------|---------|----------|----------|
| Part# | A0 | B0 | K0 | F | E |
| ASPI-104S-xxx | 10.6±0.1 | 10.6±0.1 | 4.6±0.1 | 11.5±0.1 | 1.75±0.1 |
| Part# | W | P | P0 | P2 | T |
| ASPI-104S-xxx | 24±0.3 | 16±0.1 | 4.0±0.1 | 2.0±0.1 | 0.4±0.05 |

| | | | | |
|---------------|----------|---------|----------|---------|
| Part# | A | B | C | D |
| ASPI-104S-xxx | 24.5±0.2 | 100±0.5 | 13.2±0.3 | 330±1.0 |

Dimension: mm

REFLOW PROFILE:



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