

ASPI-5040S-3R3N-T Datasheet



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DiGi Electronics Part Number ASPI-5040S-3R3N-T-DG

Manufacturer Abracon LLC

Manufacturer Product Number ASPI-5040S-3R3N-T

Description FIXED IND 3.3UH 3.8A 27 MOHM

Detailed Description 3.3 µH Shielded Wirewound Inductor 3.3 A 32mOhm

Max Nonstandard



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Purchase and inquiry

| Manufacturer Product Number: | Manufacturer: |
|------------------------------|---------------------------------------|
| ASPI-5040S-3R3N-T | Abracon LLC |
| Series: | Product Status: |
| ASPI-5040S | Active |
| Type: | Material - Core: |
| Wirewound | |
| Inductance: | Tolerance: |
| 3.3 µH | ±30% |
| Current Rating (Amps): | Current - Saturation (Isat): |
| 3.3 A | 3.8A |
| Shielding: | DC Resistance (DCR): |
| Shielded | 32mOhm Max |
| Q @ Freq: | Frequency - Self Resonant: |
| | |
| Ratings: | Operating Temperature: |
| | -40°C ~ 125°C |
| Inductance Frequency - Test: | Features: |
| 100 kHz | |
| Mounting Type: | Package / Case: |
| Surface Mount | Nonstandard |
| Supplier Device Package: | Size / Dimension: |
| | 0.197" L x 0.197" W (5.00mm x 5.00mm) |
| Height - Seated (Max): | |
| 0.157" (4.00mm) | |

Environmental & Export classification

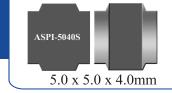
8504.50.4000

| RoHS Status: | Moisture Sensitivity Level (MSL): |
|------------------|-----------------------------------|
| ROHS3 Compliant | Not Applicable |
| REACH Status: | ECCN: |
| REACH Unaffected | EAR99 |
| HTSUS: | |

Low Profile Shielded SMD Chip Power Inductor

ASPI-5040S





FEATURES:

- Magnetically shielded for low radiation
- Large Terminal surface for good PCB mounting
- Low DCR and high rated current
- Suitable for DC-DC converter applications

► APPLICATIONS:

- · Partable communication equipment
- OA equipment
- LCD, DVD, modem, set-top box
- DC/DC converters

ELECTRICAL SPECIFICATIONS:

| Part Number | Inductance | Tolerance | DCR Max | DCR Typ | Current Max | Temperature Rise Current Max |
|----------------|------------|-------------------|----------------|----------------|----------------|------------------------------------|
| Units | μН | % | ${ m m}\Omega$ | ${ m m}\Omega$ | A | A |
| Symbol | L | M=±20%, N=±30% | DCR | DCR | Isat | Irms |
| ASPI-5040S-1R5 | 1.5 | N | 24 | 20 | 6.00 | 3.60 |
| ASPI-5040S-2R2 | 2.2 | N | 26 | 22 | 4.60 | 3.50 |
| ASPI-5040S-3R3 | 3.3 | N | 32 | 27 | 3.80 | 3.30 |
| ASPI-5040S-4R7 | 4.7 | N | 35 | 29 | 3.30 | 3.10 |
| ASPI-5040S-6R8 | 6.8 | M | 59 | 49 | 2.60 | 2.30 |
| ASPI-5040S-100 | 10 | M | 67 | 56 | 2.30 | 2.10 |
| ASPI-5040S-150 | 15 | M | 96 | 80 | 2.00 | 1.80 |
| ASPI-5040S-220 | 22 | M | 151 | 126 | 1.60 | 1.40 |
| ASPI-5040S-330 | 33 | M | 216 | 180 | 1.30 | 1.20 |
| ASPI-5040S-470 | 47 | M | 372 | 310 | 1.10 | 0.90 |

Test Criteria:

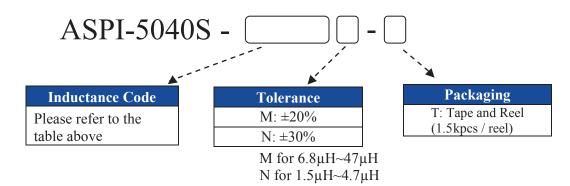
Inductance: 100kHz, 1V

Isat: Based on inductance change ($\Delta L/Lo$: \leq -30%) Irms: Based on temperature rise (ΔT : 40°C TYP.)

Storage Temperature -40°C ~125°C (including self-generated heat)

Operating Temperature $-40^{\circ}C \sim 125^{\circ}C$

> OPTIONS AND PART IDENTIFICATION





REVISED: 12-02-19

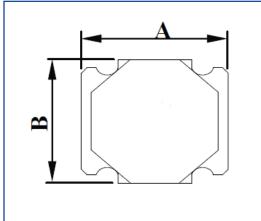
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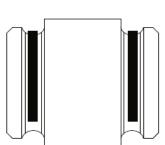
ASPI-5040S





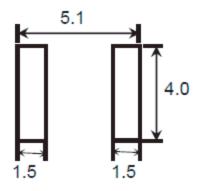
OUTLINE DRAWING:





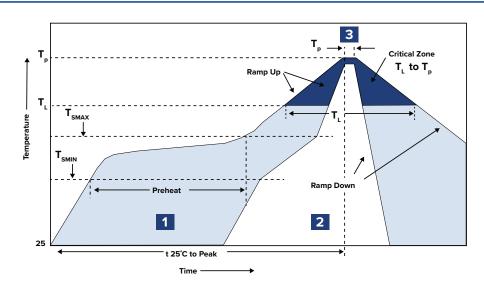
| A | 5.0±0.2 |
|---|----------|
| В | 5.0±0.2 |
| C | 4.0 Max. |

Recommended Land Pattern



Dimensions: mm

REFLOW PROFILE



| Zone | Description | Temperature | Time |
|------|----------------|----------------------------|-------------|
| 1 | Preheat / Soak | T _{SMAX} 150°C | 60 sec. |
| 2 | Reflow | Т _ь 200°С | 20 sec. MAX |
| 3 | Peak heat | Т _Р 260°С | 10 sec. MAX |



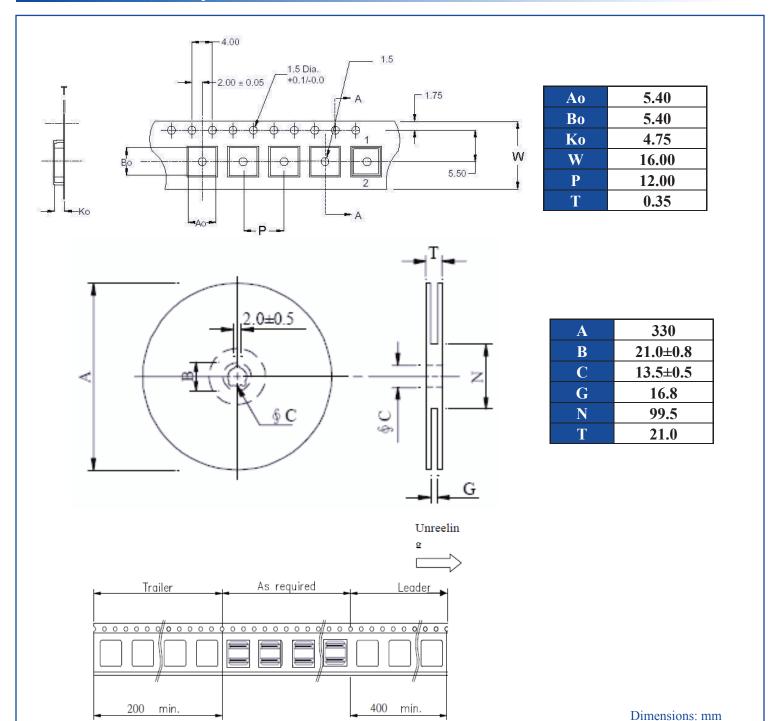
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➤ TAPE & REEL: T: 1500pcs/reel



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