

Datasheet

RS Pro Shielded Power Inductors



Features:

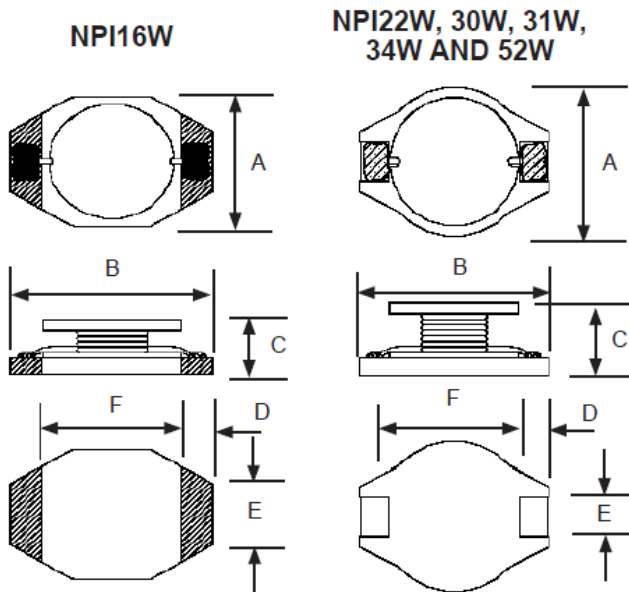
- High Current, small size (Up to 8.6 AMPS)
- Surface mountable construction
- High inductance (Up to 1000 μ H)
- Taped and reeled for automatic insertion
- For use in DC/DC converters

| | |
|--|----------------------|
| Case Size | 52 |
| Inductance Range | 1 ~ 1000 μ H |
| Inductance Tolerance | 20% (M) |
| Ambient Operating Temperature Range | -40°C ~+125°C |
| Maximum Component Temperature (Ambient + Self-Heating) | +145°C* |
| Inductance Change at Isat | -10% typical |
| Temperature Raise at Irms | 40°C max. |
| Resistance to Solder Heat | 260°C for 10 seconds |

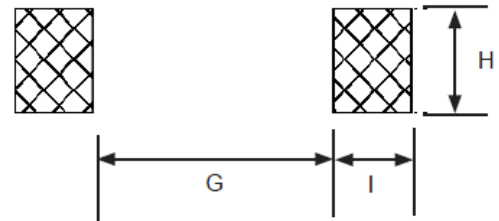
Dimensions:

| Size | A | B | C | D | E | F | G (Ref) | H (Ref) | I (Ref) |
|------|---------------|----------------|---------------|---------------|---------------|----------------|---------|---------|---------|
| 52 | 15.0 ± 0.3 | 18.40 ± 0.3 | 7.00 ± 0.5 | 2.40 ± 0.2 | 2.20 ± 0.2 | 13.30 ± 0.3 | 12.7 | 2.8 | 3 |

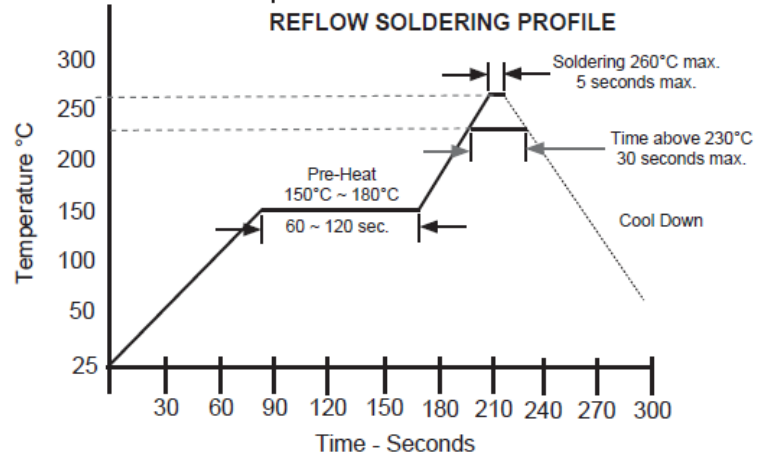
CONSTRUCTION



LAND PATTERN

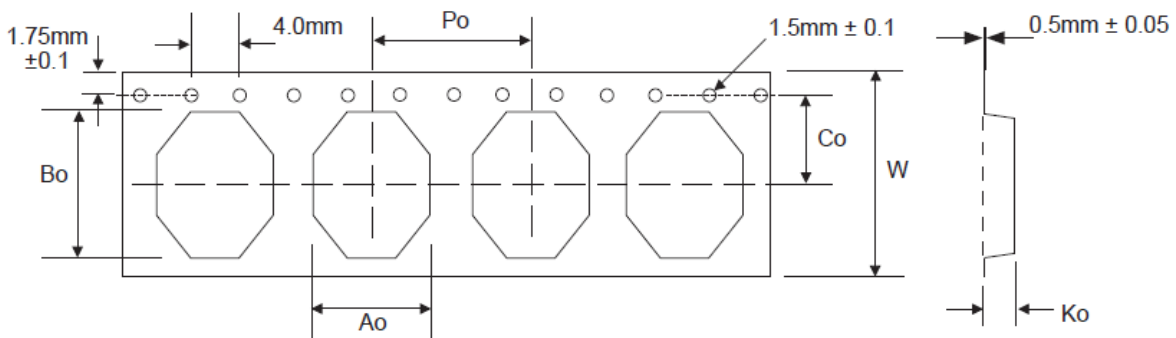


REFLOW SOLDERING PROFILE

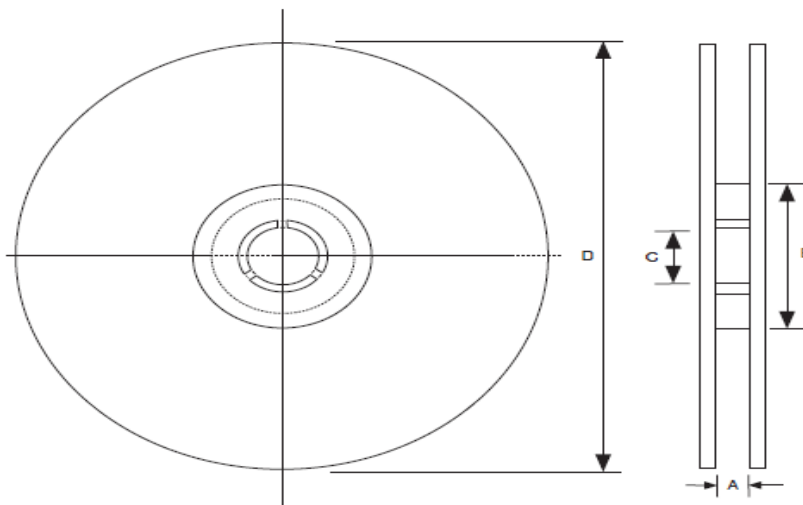


| Stock No. | STANDARD VALUES – CASE SIZE 52 (15.0 x 18.4 x 7.0mm) | | | | | |
|-----------|--|-------------------|----------------------------|------------------------------------|------------------------------------|----------------|
| | Inductance Value (μ H) | SRF (Typical) MHz | DC Resistance (Ω) | DC Current I _{rms} (Amps) | DC Current I _{rms} (Amps) | Test Frequency |
| 7409485 | 10 \pm 20% | 21 | 0.031 | 4.3 | 10 | 100KHz |
| 7409508 | 100 \pm 20% | 5.7 | 0.19 | 1.8 | 3.0 | 100KHz |
| 7409520 | 1000 \pm 20% | 2.0 | 1.30 | 0.56 | 1.0 | 100KHz |
| 7409502 | 150 \pm 20% | 4.5 | 0.25 | 1.5 | 2.6 | 100KHz |
| 7409511 | 220 \pm 20% | 3.7 | 0.38 | 1.2 | 2.4 | 100KHz |
| 7409491 | 33 \pm 20% | 11 | 0.066 | 3.0 | 5.5 | 100KHz |
| 7409514 | 330 \pm 20% | 3.0 | 0.56 | 1.0 | 1.9 | 100KHz |
| 7409495 | 47 \pm 20% | 9.0 | 0.086 | 2.6 | 4.5 | 100KHz |
| 7409518 | 470 \pm 20% | 2.7 | 0.85 | 0.82 | 1.4 | 100KHz |
| 7409505 | 68 \pm 20% | 6.5 | 0.13 | 2.3 | 3.5 | 100KHz |

| Case size | CARRIER TAPE DIMENSIONS (mm) | | | | | |
|-----------|------------------------------|-------|-------|------|------|------|
| | Ao | Bo | Co | Ko | W | Po |
| 52 | 18.70 | 15.40 | 14.25 | 7.60 | 32.0 | 20.0 |



| Tape Width | REEL DIMENSIONS (12mm) | | | |
|------------|------------------------|-------|--------|-------|
| | A(mm) | B(mm) | C(mm) | D(mm) |
| 16mm | 16.5±0.1 | 100±1 | 13±0.5 | 330 |
| 24mm | 24.5±0.1 | | | |
| 32mm | 32.5±0.1 | | | |



| Size | REEL QUANTITY PER CASE SIZE |
|-------------------|-----------------------------|
| | |
| Quantity per reel | 250 |
| Tape Width | 32mm |