

SMT POWER INDUCTORS

Shielded Drum Core - PF0464/PF0465 Series



- Height:** PF0464: 3mm Max - PF0465: 4mm Max
- Small Size:** 7.2mm x 7.2mm Max
- Current Rating:** PF0464: up to 4.5A - PF0465: up to 3.5A
- Inductance Range:** 1.5μH to 100μH

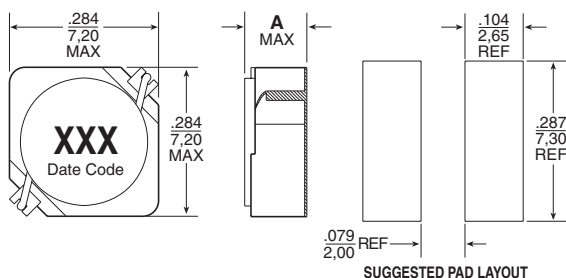
Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C^{1,6}

| Part ⁵ Number | Inductance ¹ @ I _{rated} (μH TYP) | I _{rated} ² (A) | DCR (mΩ) | | Inductance @ 0A _{dc} (μH ±20%) | Saturation Current I _{sAT} (A) | Heating ⁴ Current I _{bc} (A) |
|--------------------------|---|-------------------------------------|----------|-----|---|---|--|
| | | | TYP | MAX | | | |
| PF0464 SERIES | | | | | | | |
| PF0464.152 | 1.2 | 4.50 | 9 | 12 | 1.5 | 4.50 | 5.50 |
| PF0464.302 | 2.4 | 3.00 | 17 | 22 | 3.0 | 3.00 | 4.25 |
| PF0464.392 | 3.1 | 2.60 | 19 | 25 | 3.9 | 2.60 | 3.80 |
| PF0464.502 | 4.0 | 2.40 | 24 | 30 | 5.0 | 2.40 | 3.55 |
| PF0464.602 | 4.8 | 2.25 | 26 | 33 | 6.0 | 2.25 | 3.20 |
| PF0464.732 | 5.8 | 2.10 | 36 | 45 | 7.3 | 2.10 | 3.10 |
| PF0464.862 | 6.9 | 1.85 | 38 | 48 | 8.6 | 1.85 | 2.95 |
| PF0464.103 | 8.0 | 1.70 | 41 | 52 | 10 | 1.70 | 2.90 |
| PF0464.123 | 9.6 | 1.55 | 52 | 66 | 12 | 1.55 | 2.40 |
| PF0464.153 | 12.0 | 1.40 | 55 | 75 | 15 | 1.40 | 2.35 |
| PF0464.183 | 14.4 | 1.32 | 69 | 90 | 18 | 1.32 | 2.10 |
| PF0464.223 | 17.6 | 1.20 | 85 | 113 | 22 | 1.20 | 1.85 |
| PF0464.273 | 21.6 | 1.05 | 104 | 132 | 27 | 1.05 | 1.70 |
| PF0464.333 | 26.4 | 0.97 | 132 | 165 | 33 | 0.97 | 1.50 |
| PF0464.393 | 31.2 | 0.86 | 142 | 180 | 39 | 0.86 | 1.45 |
| PF0464.473 | 37.6 | 0.80 | 197 | 238 | 47 | 0.80 | 1.25 |
| PF0464.563 | 44.8 | 0.73 | 216 | 270 | 56 | 0.73 | 1.15 |
| PF0464.683 | 54.4 | 0.65 | 235 | 300 | 68 | 0.65 | 1.10 |
| PF0464.823 | 65.6 | 0.60 | 291 | 370 | 82 | 0.60 | 1.00 |
| PF0464.104 | 80.0 | 0.54 | 401 | 505 | 100 | 0.54 | 0.85 |
| PF0465 SERIES | | | | | | | |
| PF0465.332 | 2.6 | 3.50 | 16 | 20 | 3.3 | 3.50 | 4.65 |
| PF0465.502 | 4.0 | 2.90 | 19 | 24 | 5.0 | 2.90 | 4.10 |
| PF0465.622 | 5.0 | 2.50 | 21 | 26 | 6.2 | 2.50 | 3.90 |
| PF0465.732 | 5.8 | 2.30 | 25 | 31 | 7.3 | 2.30 | 3.50 |
| PF0465.862 | 6.9 | 2.20 | 27 | 34 | 8.6 | 2.20 | 3.30 |
| PF0465.103 | 8.0 | 2.00 | 29 | 37 | 10 | 2.00 | 3.20 |
| PF0465.123 | 9.6 | 1.70 | 39 | 50 | 12 | 1.70 | 2.80 |
| PF0465.153 | 12.0 | 1.60 | 44 | 55 | 15 | 1.60 | 2.60 |
| PF0465.183 | 14.4 | 1.50 | 62 | 78 | 18 | 1.50 | 2.25 |
| PF0465.223 | 17.6 | 1.30 | 68 | 86 | 22 | 1.30 | 2.10 |
| PF0465.273 | 21.6 | 1.20 | 75 | 95 | 27 | 1.20 | 2.00 |
| PF0465.333 | 26.4 | 1.10 | 94 | 118 | 33 | 1.10 | 1.75 |
| PF0465.393 | 31.2 | 1.00 | 101 | 128 | 39 | 1.00 | 1.70 |
| PF0465.473 | 37.6 | 0.95 | 112 | 140 | 47 | 0.95 | 1.60 |
| PF0465.563 | 44.8 | 0.85 | 154 | 195 | 56 | 0.85 | 1.35 |
| PF0465.683 | 54.4 | 0.75 | 188 | 234 | 68 | 0.75 | 1.25 |
| PF0465.823 | 65.6 | 0.70 | 261 | 324 | 82 | 0.70 | 1.05 |
| PF0465.104 | 80.0 | 0.65 | 286 | 350 | 100 | 0.65 | 1.00 |

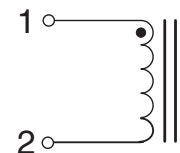
* NOTE: To order RoHS compliant part, add the suffix "NL" to the part number (i.e. PF0464.152 becomes PF0464.152NL and PF0464.152T becomes PF0464.152NLT).

Mechanical

Schematic

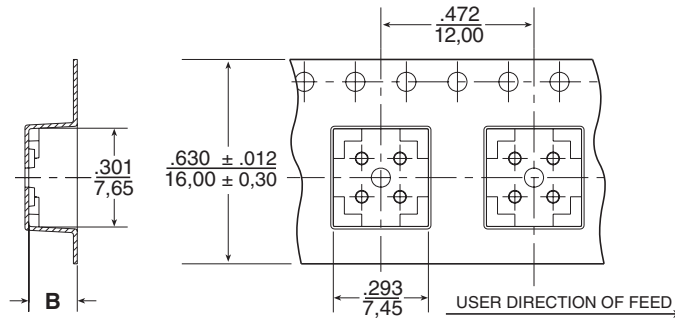


| | | |
|---|---------------|---------------|
| | PF0464 | PF0465 |
| Weight..... | 0.5 grams | 0.7 grams |
| Tape & Reel | 1200/reel | 900/reel |
| "A" (height - in./mm) | 0.118/3,00 | 0.158/4,00 |
| Dimensions: $\frac{\text{Inches}}{\text{mm}}$ | | |
| Unless otherwise specified, all tolerances are \pm .004 | | 0,10 |



Tape and Reel Layout

PF0464 PF0465
"B" (height - in./mm)0.150/3,800.205/5,20



Notes from Tables

1. Inductance at I_{rated} is a typical inductance value measured when the inductor is subjected to the rated current.
2. The rated current as listed is either the saturation current @ 25°C or the heating current depending on which value is lower.
3. The saturation current I_{sat} is the current which causes the inductance to drop by 20% (typical) at an ambient temperature of 25°C. This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effects) to the component.
4. The heating current I_{DC} is the DC current which causes the temperature rise of the part to increase by approximately 40°C. This current is determined by mounting the component on a typical application PCB and applying the current to the device for 30 minutes.
5. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PF0464.152 becomes PF0464.152T). Pulse complies to industry standard tape and reel specification EIA481.
6. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

Inductance vs Current Characteristics

