

SMD Power Inductor – PTS



Applications

- Notebook/PC/Server applications
- Low profile , high current power supplies
- Battery powered devices
- DC/DC converters

Inductance and rated current ranges

- PTS2210 1.0~220μH 2.32~0.02A
- PTS2218 1.0~100μH 1.69~0.16A
- PTS2225 1.0~270μH 1.81~0.10A
- Test equipment:

L: HP4284A Precision LCR meter.

DCR: Milli-ohm meter.

Electrical Specification at 25°C

Product Identification

PTS 2210 M I 1R0

(1) (2) (3) (4) (5)

(1)Type: SMD Power Inductors

(2)Dimensions (mm):2210=3.1×3.1×1.25

(3)Tolerance: M=20%,N=30%

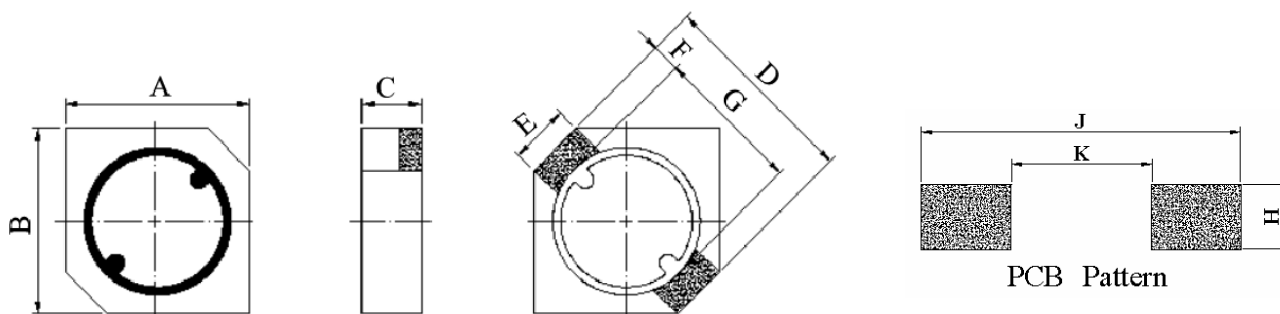
(4) Packaging style: T (Tape and Reel)

(5) Inductance:1R1=1.1μH,R47=0.47μH

Features

- Shielded construction
- Small size with the electrode attached to the ferrite RI core directly.
- Excellent property either high saturation for surface mounting.

Dimension



Unit: mm

| Codes | A | B | C | D (Ref.) | E (Ref.) | F (Ref.) | G (Ref.) | H (Ref.) | J (Ref.) | K (Ref.) |
|---------|----------|----------|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| PTS2210 | 3.10±0.3 | 3.10±0.3 | 1.25 max | 3.60 | 1.30 | 0.60 | 2.20 | 0.90 | 4.00 | 2.20 |
| PTS2218 | 3.10±0.3 | 3.10±0.3 | 1.80±0.2 | 3.60 | 1.30 | 0.60 | 2.20 | 0.90 | 4.00 | 2.20 |
| PTS2225 | 3.10±0.3 | 3.10±0.3 | 2.50±0.2 | 3.60 | 1.30 | 0.60 | 2.20 | 0.90 | 4.00 | 2.20 |

Electrical Characteristics
2210 / 2218 / 2225 TYPE

| Part No. | L (uH) | Tol. | DC Resistance (Ω) Max | | | Rated DC current (Amp) Max | | |
|----------|--------|------|-----------------------|-------|-------|----------------------------|------|------|
| | | | 2210 | 2218 | 2225 | 2210 | 2218 | 2225 |
| 1R0 | 1 | M ,N | 0.123 | 0.055 | 0.042 | 2.32 | 1.69 | 1.81 |
| 1R2 | 1.2 | M ,N | 0.130 | | 0.051 | 1.92 | | 1.56 |
| 1R5 | 1.5 | M ,N | 0.165 | | 0.057 | 1.6 | | 1.39 |
| 1R7 | 1.7 | M ,N | 0.179 | | | 1.5 | | |
| 1R8 | 1.8 | M ,N | 0.221 | | 0.065 | 1.3 | | 1.28 |
| 2R2 | 2.2 | M ,N | 0.238 | 0.13 | 0.073 | 1.21 | 1.22 | 1.25 |
| 2R6 | 2.6 | M ,N | 0.269 | | | 1.1 | | |
| 2R7 | 2.7 | M ,N | 0.280 | 0.16 | 0.082 | 1.07 | 1.08 | 1.1 |
| 3R0 | 3 | M ,N | 0.304 | | | 1.04 | | |
| 3R3 | 3.3 | M ,N | 0.339 | 0.19 | 0.088 | 1.01 | 0.99 | 1 |
| 3R9 | 3.9 | M ,N | 0.395 | 0.25 | 0.11 | 0.89 | 0.85 | 0.9 |
| 4R1 | 4.1 | M ,N | 0.444 | | | 0.81 | | |
| 4R7 | 4.7 | M ,N | 0.510 | 0.28 | 0.13 | 0.79 | 0.8 | 0.84 |
| 5R6 | 5.6 | M ,N | 0.656 | 0.29 | 0.19 | 0.75 | 0.78 | 0.8 |
| 6R2 | 6.2 | M ,N | | 0.31 | | | 0.76 | |
| 6R3 | 6.3 | M ,N | 0.690 | | | 0.72 | | |
| 6R8 | 6.8 | M ,N | 0.810 | 0.36 | 0.22 | 0.65 | 0.7 | 0.73 |
| 8R2 | 8.2 | M ,N | 0.857 | 0.43 | 0.28 | 0.61 | 0.65 | 0.66 |
| 100 | 10 | M | 1.071 | 0.55 | 0.36 | 0.54 | 0.51 | 0.54 |
| 120 | 12 | M | 1.180 | 0.66 | 0.4 | 0.51 | 0.48 | 0.49 |
| 150 | 15 | M | 1.667 | 0.82 | 0.45 | 0.44 | 0.47 | 0.48 |
| 180 | 18 | M | 1.890 | 1.07 | 0.55 | 0.39 | 0.41 | 0.42 |
| 200 | 20 | M | 2.100 | | | 0.36 | | |
| 220 | 22 | M | 2.349 | 1.21 | 0.69 | 0.34 | 0.36 | 0.37 |
| 270 | 27 | M | 2.670 | 1.51 | 0.88 | 0.32 | 0.31 | 0.33 |
| 330 | 33 | M | 3.520 | 2.01 | 1.03 | 0.28 | 0.28 | 0.3 |
| 390 | 39 | M | 4.030 | 2.27 | 1.32 | 0.27 | 0.26 | 0.28 |
| 470 | 47 | M | 4.550 | 2.54 | 1.45 | 0.25 | 0.24 | 0.26 |
| 500 | 50 | M | 5.000 | | | 0.23 | | |
| 560 | 56 | M | | 3.34 | 1.85 | | 0.22 | 0.23 |
| 680 | 68 | M | 6.100 | 3.67 | 2.05 | 0.22 | 0.2 | 0.2 |
| 820 | 82 | M | 10.400 | 4.18 | 2.74 | 0.2 | 0.19 | 0.19 |
| 101 | 100 | M | 11.000 | 5.14 | 3.79 | 0.16 | 0.16 | 0.16 |
| 121 | 120 | M | 16.500 | | 4.02 | 0.09 | | 0.15 |
| 151 | 150 | M | 17.000 | | 5.32 | 0.06 | | 0.13 |
| 181 | 180 | M | | | 5.81 | | | 0.13 |
| 221 | 220 | M | 24.670 | | 6.53 | 0.02 | | 0.11 |
| 271 | 270 | M | | | 9.13 | | | 0.1 |

1. Rated Current (IDC): 2210 The DC current when the inductance becomes 65% lower than its initial value. (Ta=25°C).
2218 / 2225 The DC current when the inductance becomes 70% lower than its initial value. (Ta=25°C)
2. Test Frequency: 1.0uH~8.2uH @ 100KHz 0.25Vrms ; 10uH~270uH @ 1KHz 0.25Vrms
3. Operating temperature range -40 ~ +85°C