

FLAT WIRE POWER INDUCTOR - EHFMP5643 SERIES



•FEATURE

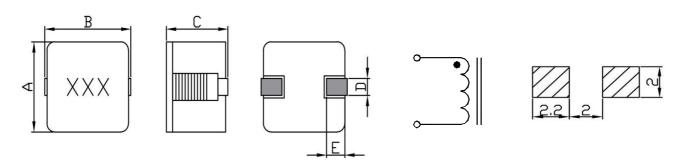
- 1. Shielded construction
- 2. High current and low DCR for flat wire type
- 3. Cross out as Wurth 744316xxx

Applications

1. Notebook, server application, High current power supplier

Shape and Dimension

• Schematics and Land Patterns(mm)



A=5.30±0.30m/m ; B= 5.60 ± 0.30 m/m ; C=4.30m/m MAX; D= 1.00 ± 0.30 m/m; E= 1.20 ± 0.50 m/m \bigcirc Specification

RDC L **RDC** Isat Irms P/N (mΩ) Typical (mΩ) Max (A) (A) (μH) EHFMP5643-R22M 0.22±20% 1.25 1.38 25 20 1.75 0.33±20% 20 18.5 EHFMP5643-R33M 1.93 EHFMP5643-R47M 0.47±20% 2.75 15 3.03 16 EHFMP5643-R68M 0.68±20% 4.00 4.40 13.5 12.75 EHFMP5643-1R0M 4.75 11.5 1.0±20% 5.23 11.5 EHFMP5643-1R5M 1.5±20% 8.15 8.97 9.0 9.0 EHFMP5643-2R2M 2.2±20% 11.30 12.43 7.5 7.5 EHFMP5643-3R3M 3.3±20% 18.50 20.35 5.8 5.75

Note1. Measurement frequency of Inductance value: at 100KHz

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

4.7±20%

5.6±20%

Note3. Isat: DC current at which the inductance drops 30%(typ) from its value without current

24.50

28.50

26.95

31.35

4.7

4.6

Note4. Irms: Average current for 50°C temperature rise from 25°C ambient(typical)

Note5. Inductance tolerance: M: ±20%

EHFMP5643-4R7M

EHFMP5643-5R6M

Note6. Packaging: Taping; Quantity: 1000 pieces/reel

4.6

4.5



FLAT WIRE POWER INDUCTOR - EHFMP5643 SERIES



GENERAL CHARACTERISTICS

- 1. Operating temperature range: -40 TO + 150°C (Includes temperature when the coil is heated)
- 2. External appearance: On visual inspection, the coil has no external defects.
- Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Ywithstanding at below conditions.

Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.



- 5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
- 6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/°C (-25~+80°C).
- 7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2°C and 1 hour drying under normal condition.
- 8. Vibration resistance: Inductance deviation within ±5%, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
- 9. Shock resistance: Inductance deviation within ±5%, after being dropped once with 981m/s2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
- 10. Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow)
- 11. Storage environment: Storage condition: Temperature Range: $10^{\circ}\text{C} \sim 35^{\circ}\text{C}$ (Generally: $21^{\circ}\text{C} \sim 31^{\circ}\text{C}$) , Humidity Range: $50\% \sim 80\%$ RH (Generally: $65\% \sim 75\%$); Transportation condition: Temperature Range: $-35^{\circ}\text{C} \sim 85^{\circ}\text{C}$, Humidity Range: $50\% \sim 95\%$ RH
- 12. Use components within 6 months. If 6 months or more have elapsed, check solderability before use.
- 13. Reflow profile recommend:

Lead-free heat endurance test

Lead-free the recommended reflow condition

