# HFMP5643 TYPE

### **FEATURE**

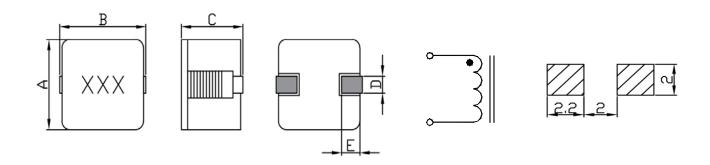
- 1. Shielded construction
- 2. High current and low DCR for flat wire type
- 3. Cross out as Wurth 744316xxx

#### Applications

1. Notebook, server application, High current power supplier

## Shape and Dimension

Schematics and Land Patterns(mm)



 $A = 5.30 \pm 0.30 \, \text{m/m} \; ; \; B = 5.60 \pm 0.30 \, \text{m/m} \; ; \; C = 4.30 \, \text{m/m} \; MAX; \; D = 1.00 \pm 0.30 \, \text{m/m}; \; E = 1.20 \pm 0.50 \, \text{m/m} \; ; \; C = 1.00 \pm 0.30 \, \text{m/m}; \; E = 1.20 \pm 0.50 \, \text{m/m} \; ; \; E = 1.20$ 

# Specification

	L	RDC	RDC	Isat	Irms
P/N	(µH)	(mΩ) Typical	(mΩ) Max	(A)	(A)
HFMP5643-R22M	0.22±20%	1.25	1.38	25	20
HFMP5643-R33M	0.33±20%	1.75	1.93	20	18.5
HFMP5643-R47M	0.47±20%	2.75	3.03	16	15
HFMP5643-R68M	0.68±20%	4.00	4.40	13.5	12.75
HFMP5643-1R0M	1.0±20%	4.75	5.23	11.5	11.5
HFMP5643-1R5M	1.5±20%	8.15	8.97	9.0	9.0
HFMP5643-2R2M	2.2±20%	11.30	12.43	7.5	7.5
HFMP5643-3R3M	3.3±20%	18.50	20.35	5.8	5.75
HFMP5643-4R7M	4.7±20%	24.50	26.95	4.7	4.6
HFMP5643-5R6M	5.6±20%	28.50	31.35	4.6	4.5

Note1. Measurement frequency of Inductance value: at 100KHz

Note2. Measurement ambient temperature of L, DCR and IDC : at  $25^{\circ}$ C

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

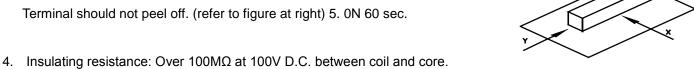
Note4. Irms: Average current for 50°C temperature rise from 25°C ambient(typical)

Note5. Inductance tolerance: M: ±20%

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

# 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.
- 3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Ywithstanding at below conditions.



- Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
- Temperature characteristics: Inductance coefficient (0~2,000)x10-6/°C (-25~+80°C).
- 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.
- Resistance to Soldering Heat: 260℃, 10 seconds(See attached recommend reflow)
- 11. Storage environment: Storage condition: Temperature Range:  $10^{\circ}$ C ~  $35^{\circ}$ C (Generally:  $21^{\circ}$ C ~  $31^{\circ}$ C) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%); Transportation condition: Temperature Range: -35°C ~ 85°C , Humidity Range: 50% ~ 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

