# HFMP1042 TYPE

## **FEATURE**

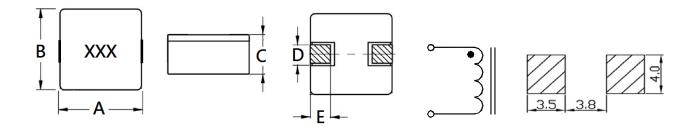
- 1. Shielded construction
- 2. High current and low DCR for flat wire type
- 3. Cross out as Wurth 744355xxx

## Applications

1. Notebook, server application, High current power supplier

Shape and Dimension

Schematics and Land Patterns(mm)



 $A = 10.50 \pm 0.50 \text{m/m} \; ; \; B = 10.20 \pm 0.50 \text{m/m} \; ; \; C = 4.20 \text{m/m} \; MAX; \; D = 2.00 \pm 0.50 \text{m/m}; \; E = 2.00$ 

## Specification

	L	RDC	RDC	Isat	Irms
P/N	(µH)	(mΩ) Typical	(mΩ) Max	(A)	(A)
HFMP1042-R15M	0.15±20%	0.58	0.64	60	25
HFMP1042-R30M	0.30±20%	1.10	1.21	35	22
HFMP1042-R56M	0.56±20%	1.61	1.77	30	20
HFMP1042-1R0M	1.0±20%	3.30	3.63	20	16
HFMP1042-1R5M	1.5±20%	5.30	5.83	17	14
HFMP1042-2R2M	2.2±20%	7.30	8.03	13	11
HFMP1042-2R8M	2.8±20%	10.6	11.66	11	9.5
HFMP1042-4R3M	4.3±20%	14.1	15.51	8	8

Note1. Measurement frequency of Inductance value: at 100KHz

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

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

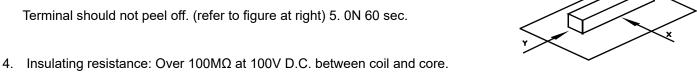
Note4. Irms: Average current for  $50^{\circ}\text{C}$  temperature rise from  $25^{\circ}\text{C}$  ambient(typical)

Note5. Inductance tolerance: M: ±20%

Note6. Packaging: Taping; Quantity: 800 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.
- 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.
- 10. 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 12 months. If 12 months or more have elapsed, check solderability before use.
- 13. Reflow profile recommend:

#### Lead-free heat endurance test

### Lead-free the recommended reflow condition

