

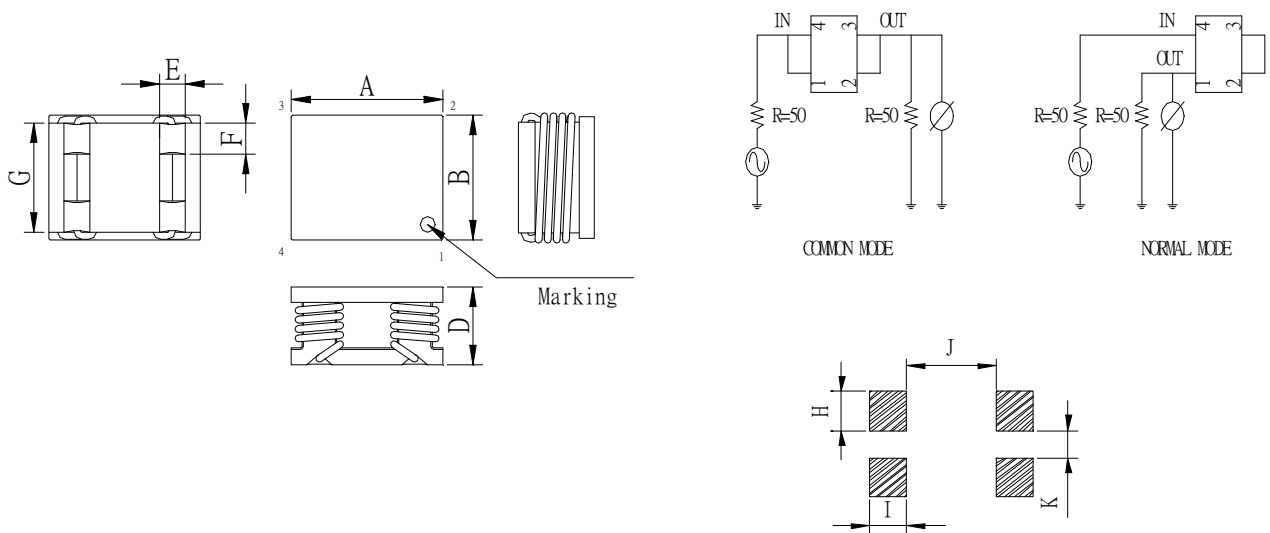
● FEATURE

1. Dual-winding configuration makes 1 unit suffice for one port
2. An excellent TPA/TPB impedance balance is ensured due to winding on a single core

● Applications

1. DC-DC converter of portable equipment
2. Notebook, LCD TV and others

● Shape and Dimension and Schematics and Land Patterns(mm)



● Specification

Dimension in m/m

TYPE	A	B	D	E	F	G	H	I	J	K
ESH 8x6x3-4.5Ts	7.50±0.20	6.00±0.20	3.00±0.20	1.50	1.50	5.40	1.90	2.40	2.00	1.50
ESH 10x8x5-4.5Ts	10.0±0.20	8.00±0.20	5.00±0.20	1.80	1.50	7.00	2.40	2.10	4.20	2.60

Note1. Measurement ambient temperature of Impedance, DCR and IDC : at 25°C

Note2. Test equipment: HP4291A

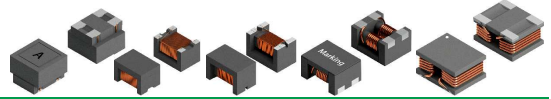
Note3. This specification might be changed without notice due to under developing and improving.

Thank you for your understanding.



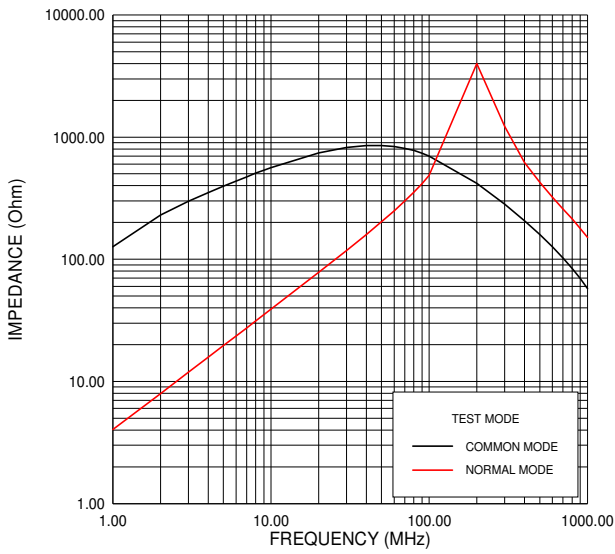
An ISO 9001 Company

# COMMON MODE INDUCTORS – ESH SERIES

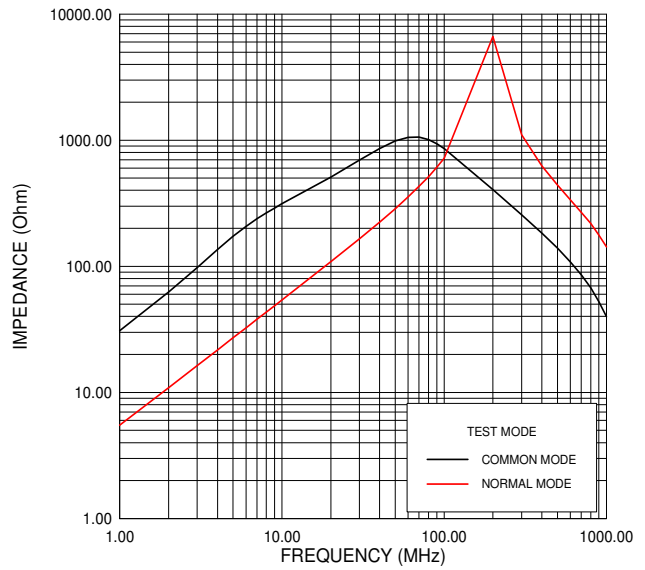


Electrical Characteristics	Frequency	Electrical Characteristics	
		ESH 8x6x3-4.5Ts	ESH 10x8x5-4.5Ts
Common mode	100MHz	700 Ω ± 25%	860 Ω ± 25%
	400MHz	200 Ω ± 25%	180 Ω ± 25%
Normal mode	100MHz	600 Ω ± 25%	720 Ω ± 25%
	400MHz	100 Ω ± 25%	620 Ω ± 25%
DC Resistance		50mΩMax	45mΩMax
Rated current		5A	5A

● ESH 8x6x3-4.5Ts



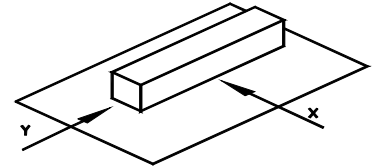
● ESH 10x8x5-4.5Ts



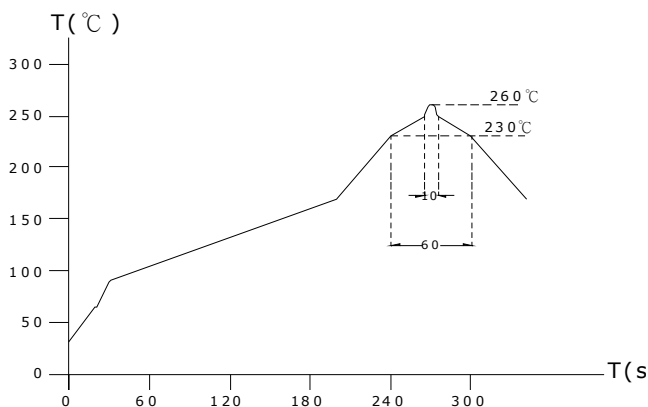


## GENERAL CHARACTERISTICS

- Operating temperature range: -25 TO + 105°C (Includes temperature when the coil is heated)
- 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.Y withstanding at below conditions.  
Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.
- Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
- Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
- Temperature characteristics: Inductance coefficient  $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$  (-25~+80°C).
- Humidity characteristics(Moisture Resistance): Inductance deviation within  $\pm 5\%$ , after 96 hours in 90~95% relative humidity at  $40 \pm 2^{\circ}\text{C}$  and 1 hour drying under normal condition.
- Vibration resistance: Inductance deviation within  $\pm 5\%$ , after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
- Shock resistance: Inductance deviation within  $\pm 5\%$ , after being dropped once with 981m/s<sup>2</sup> (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
- Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow)
- Storage environment: Storage condition: Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35°C ~ 85°C , Humidity Range: 50% ~ 95% RH
- Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
- Reflow profile recommend:



Lead-free heat endurance test



Lead-free the recommended reflow condition

