Flat Common Mode Inductors–SUQ Series

FEATURES

- ROHS, Halogen free and REACH Compliance.
- Stable performance, high frequency efficiency.
- Hight power, low DC resistane, low temperature rise.
- Easy to plug-in, high difference energy.

APPLICATIONS

Monitors, Game consoles and LED lightings,AP Rounters, STBs and LCD TVs.Notebook computer, DC - DC converters, etc

PRODUCT IDENTIFICATION

01	02	03	—	04
SUQ	12	H		10mH

01

TyPe	
ZUQ	Flat Common Mode Inductor

02

External Dimensions (ΦDxT)(mm)	
12	18*17

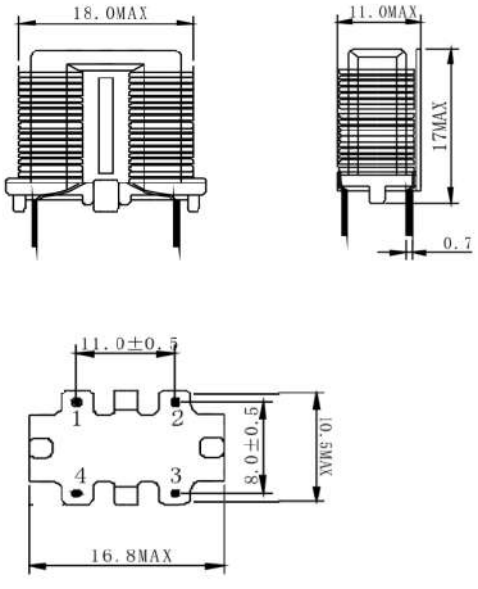
04

Nominal Inductance	
Example	Nominal value
10mH	10mH

03

Shape Type	
H	Horizontal
V	Vertical

SHAPE AND DIMENSIONS



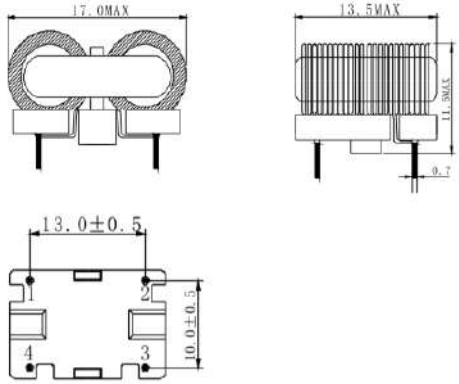
SPECIFICATIONS

● SUQ12V TYPE

Part Number	Inductance (uH)	Wire Diameter	DCR(mΩ)	Rated Current(A)	Power Range
SUQ12V-25mH	25mH	0.1*1.0	220 Max	0.5A	40W
SUQ12V-22mH	22mH	0.1*1.0	220 Max	0.6A	48W
SUQ12V-15mH	15mH	0.1*1.0	220 Max	0.7A	56W
SUQ12V-10mH	10mH	0.13*1.0	220 Max	0.75A	60W

A: Withstanding Voltage: AC 2.0KV 60Sec(Winding to Winding)
B: Measureing Condition: 1KHz, 250mV, 25°C.
C: Irat is defined as the maximum rated current that is applied to the coil with the resulted temperature rise not exceeding 40°C.

● SUQ12H TYPE

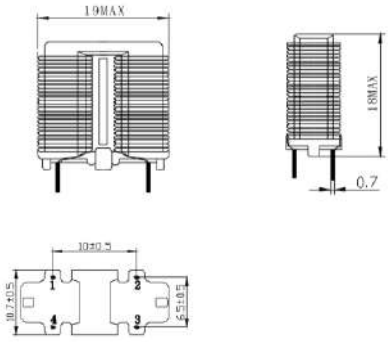


A: Withstanding Voltage: AC 2.0KV 60Sec(Winding to Winding)
B: Measureing Condition: 1KHz, 250mV, 25°C.
C: Irat is defined as the maximum rated current that is applied to the coil with the resulted temperature rise not exceeding 40°C.

Part Number	Inductance (uH)	Wire Diameter	DCR(mΩ)	Rated Current(A)	Power Range
SUQ12H-15mH	15mH	0.1*1.0	220 Max	0.5A	48W
SUQ12H-10mH	10mH	0.13*1.0	220 Max	0.6A	56W
SUQ12H-5mH	5mH	0.2*1.0	220 Max	0.7A	60W

Note: The products can be customized according to customer requirement

● SUQ15V TYPE

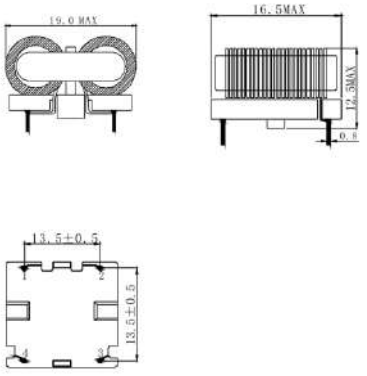


A: Withstanding Voltage: AC 2.0KV 60Sec(Winding to Winding)
B: Measureing Condition: 1KHz, 250mV, 25℃.
C: Irat is defined as the maximum rated current that is applied to the coil with the resulted temperature rise not exceeding 40℃.

Part Number	Inductance (uH)	Wire Diameter	DCR(mΩ)	Rated Current(A)	Power Range
SUQ15V-28mH	28mH	0.13*1.0	220 Max	0.6A	50W
SUQ15V-20mH	20mH	0.15*1.2	220 Max	0.7A	56W
SUQ15V-18mH	18mH	0.15*1.5	220 Max	0.9A	72W
SUQ15V-15mH	15mH	0.15*1.5	220 Max	1.5A	80W
SUQ15V-5mH	5mH	0.3*1.2	220 Max	2.0A	150W

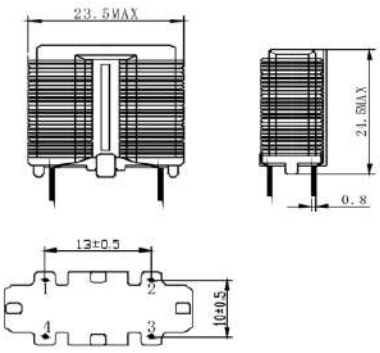
Note：The products can be customized according to customer requirement

● SUQ15H TYPE



Part Number	Inductance (uH)	Wire Diameter	DCR(mΩ)	Rated Current(A)	Power Range
SUQ15H-28mH	28mH	0.13*1.0	260 Max	0.6A	50W
SUQ15H-20mH	20mH	0.15*1.2	220 Max	0.75A	56W
SUQ15H-18mH	18mH	0.15*1.5	220 Max	0.9A	72W
SUQ15H-15mH	15mH	0.15*1.5	220 Max	1.5A	80W
SUQ15H-5mH	5mH	0.3*1.2	220 Max	2.0A	150W

● SUQ19V TYPE

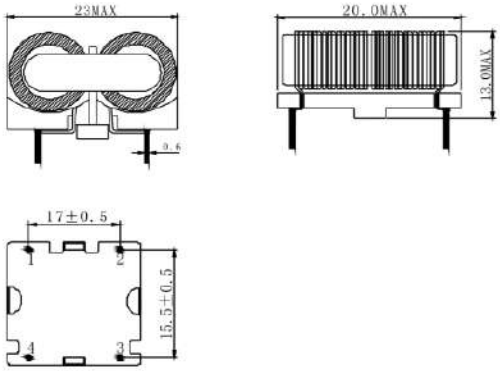


A: Withstanding Voltage: AC 2.0KV 60Sec(Winding to Winding)
B: Measureing Condition: 1KHz, 250mV, 25℃.
C: Irat is defined as the maximum rated current that is applied to the coil with the resulted temperature rise not exceeding 40℃.

Part Number	Inductance (uH)	Wire Diameter	DCR(mΩ)	Rated Current(A)	Power Range
SUQ19V-20mH	20mH	0.15*1.0	240 Max	1.0A	80W
SUQ19V-10mH	10mH	0.2*1.0	145 Max	2.25A	180W
SUQ19V-8mH	8mH	0.25*1.0	105 Max	3.5A	220W
SUQ19V-7mH	7mH	0.3*1.5	50 Max	4.5A	260W

Note：The products can be customized according to customer requirement

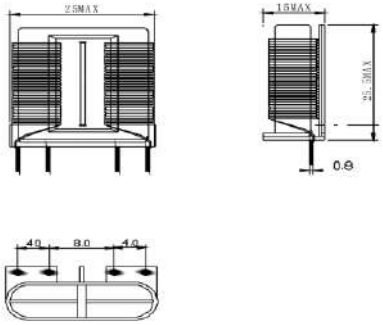
● SUQ19H TYPE



Part Number	Inductance (uH)	Wire Diameter	DCR(mΩ)	Rated Current(A)	Power Range
SUQ19H-20mH	20mH	0.15*1.0	240 Max	1.0A	80W
SUQ19H-10mH	10mH	0.2*1.0	145 Max	2.25A	180W
SUQ19H-8mH	8mH	0.25*1.2	105 Max	3.5A	220W
SUQ19H-5mH	5mH	0.3*1.2	50 Max	4.8A	280W

Note：The products can be customized according to customer requirement

● SUQ24V TYPE

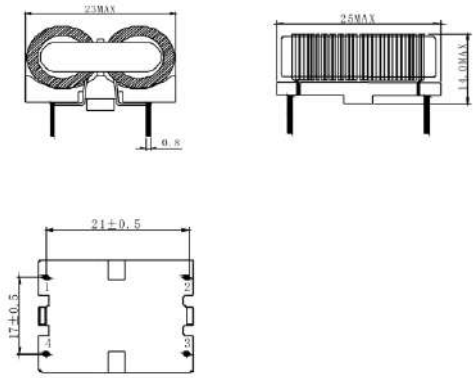


A: Withstanding Voltage: AC 2.0KV 60Sec(Winding to Winding)
B: Measureing Condition: 1KHz, 250mV, 25℃.
C: Irat is defined as the maximum rated current that is applied to the coil with the resulted temperature rise not exceeding 40℃.

Part Number	Inductance (uH)	Wire Diameter	DCR(mΩ)	Rated Current(A)	Power Range
SUQ24V-10mH	10mH	0.3*1.5	75 Max	6.5A	250W
SUQ24V-5mH	5mH	0.4*1.5	60 Max	7.5A	360W
SUQ24V-2mH	2mH	0.6*2.0	50 Max	13A	600W

Note：The products can be customized according to customer requirement

● SUQ24H TYPE



Part Number	Inductance (uH)	Wire Diameter	DCR(mΩ)	Rated Current(A)	Power Range
SUQ24H-10mH	10mH	0.3*1.5	75 Max	4.5A	250W
SUQ24H-5mH	5mH	0.4*1.5	60 Max	6.5A	360W

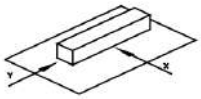
Note：The products can be customized according to customer requirement

DETAIL ELECTRICAL CHARACTERISTICS

1. Operating temperature range: -40 to + 105°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.Y
withstanding at below conditions.
Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.



4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.

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 degree Celsius), inductance deviation within±5.0%, after 96 hours.

7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2°Cand 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.

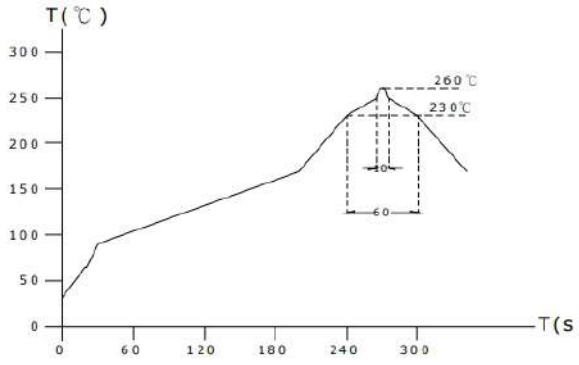
10. Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow) .

11. Storage condition: Temperature Range: 0°C ~ 35°C；-40°C ~ 105°C (after PCB)，Humidity Range: 50% ~ 70% 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