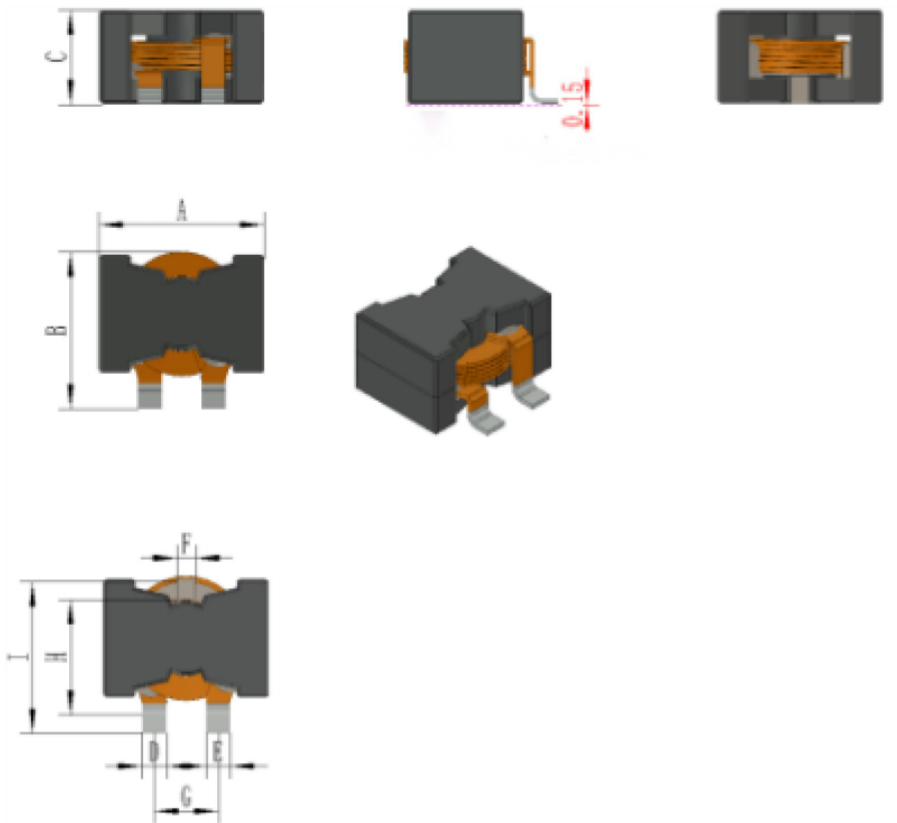
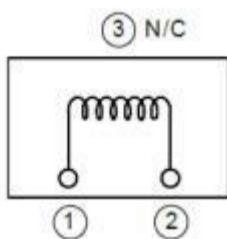
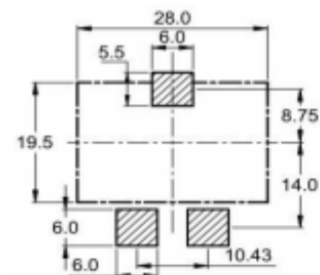


**High Current Power Inductor**
**◆ Dimensions(Unit:mm):**


<b>A</b>	28.0 MAX
<b>B</b>	27.0 MAX
<b>C</b>	15.5 MAX
<b>D</b>	4.0±0.3
<b>E</b>	4.0±0.3
<b>F</b>	3.0±0.3
<b>G</b>	10.5±0.5
<b>H</b>	18.5±0.5

**◆ Schematic:**

**Recommended PCB Layout:**

**◆ Packing Quantity:50PCS/Pallet**

**◆ Electeical Characteristics:**

Part No	L(uH) ±20%	DCR(mΩ) MAX	Irms (A)	Isat (A)
	100KHz/0.25V	AT25°C MICROTEST 6377	100KHz/0.25V	100KHz/0.25V
SLB2915P1R5MTT	1.5	2.50	30.0	>110.0
SLB2915P2R2MTT	2.2	2.50	30.0	>100.0
SLB2915P3R3MTT	3.3	2.50	30.0	70.0
SLB2915P4R7MTT	4.7	2.50	30.0	55.0
SLB2915P6R8MTT	6.8	2.50	30.0	40.0
SLB2915P100MTT	10.0	2.50	30.0	26.0
SLB2915P150MTT	15.0	2.50	30.0	16.0
SLB2915P220MTT	22.0	2.50	30.0	10.0
SLB2915P330MTT	33.0	2.50	30.0	6.0

- 1.All test data is based on 25°C ambient.
- 2.DC current(A)that will cause an approximate  $\Delta T$ 40°C
- 3.DC current(A)that will cause L0 to drop approximately 30%Typ
- 4.Operating temperature range: -40°C~+ 125°C
- 5.The part temperature (ambient + temp rise)should not exceed 125°C under worst case operating conditions. circuit design, component.PWB trace size and thickness,airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the den application

**◆ MATERIAL IDENTIFICATION**

Item	Specification	Conditions
<b>Withstanding voltage test</b>	After test, inductors shall have no evidence of electrical and mechanical damage.	AC voltage of 100v and AC current of 1mA applied between inductor's terminal and core for 3 secs.
<b>Resistance to soldering heat</b>	1. Inductor shall have no evidence of electrical and mechanical damage. 2. Inductance shall not change more than ±5%. 3. Q shall not change more than ±20%	a. Temp: 260±5°C b. Time: 10±1.0 secs
<b>Solderability test</b>	The terminal shall be at least 95% covered with solder.	After fluxing, the terminal shall be dipped in a melted solder bath at 245±5 C for 4±1.0 secs

Item	Specification	Conditions
<b>High temperature &amp; high humidity test</b>	The anti-erosion quality of the surface and the specimen's inductance shall not change from the initial value within $\pm 10\%$	a. Test condition 1)Temp.:85°C, R.H.:85% 2)Time: 144 $\pm$ 2hours b. Measurement methods: The experimental component should be put at normal condition for 2 hours then to measure again after test
<b>Salt spray test</b>		a. Test condition 1)Temp.:35 $\pm$ 2 °C 2)Time:48 $\pm$ 2hour s 3)Salt solution PH:6.5~7.2 b. Measurement methods: The experimental component should be put at normal condition for 2 hours then to measure again after test
<b>Vibration test</b>	1. Inductance shall be within $\pm 10\%$ of the initial value. 2. Appearance:no damage	a. Frequency: 10 to 55HZ b. Amplitude: 1.5mm c. Direction and time: X, Y and Z directions for 2 hours each.
<b>Free fall test</b>	No mechanical damage shall be noticed.	Drop 5 times on a concrete floor from 1m the height
<b>Temperature Cycling test</b>	1. Inductance shall be within $\pm 10\%$ of the initial value 2. Appearance:No damage	a. Test condition 1)Temp.: -55C,time:30 $\pm$ 3min 2)Temp.:+125C,time: 30 $\pm$ 3min 3)Cycles times: 12 cycles b. Measurement methods: The experimental component should be put at normal condition for 2 hours then to measure again after test
<b>High Temperature resistance test</b>		a. Test condition 1)Applied rated current 2 )Temp.:85C $\pm$ 2 C 3)Test time: 1000+24/-0H b. Measurement methods: The experimental component should be put at normal condition for 24 hours then to measure again after test

Item	Specification	Conditions
<b>Low temperature resistance test</b>	1. Inductance shall be within $\pm 10\%$ of the initial value 2. Appearance: No damage	a. Test condition 1) Temp.: $-55\text{C} \pm 2\text{ C}$ 2) Test time: $1000 + 24/-0\text{H}$ b. Measurement methods: The experimental component should be put at normal condition for 24 hours then to measure again after test.
We have suggested the storage period of lead-free product should not over 6 months.		

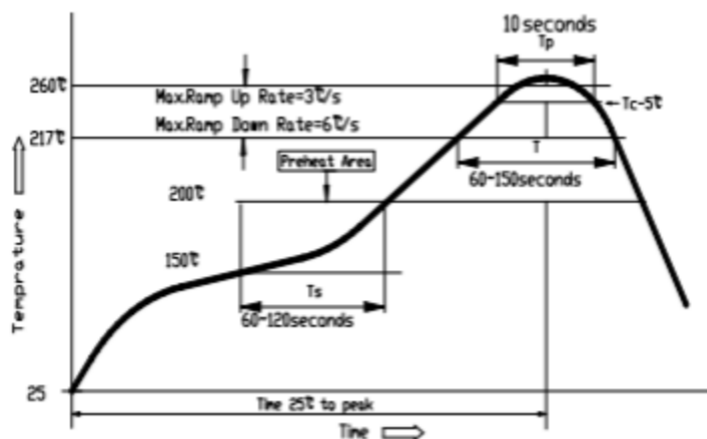
### ◆ SOLDERING CONDRTIONS:

Applicable soldering process to the products is refl.

#### 1 Soldering Materials

- (1) Solder: Sn-3.0Ag-0.5Cu
- (2) Flux: Use rosin-based flux, but not strongly acidic flux (with xhlorine exceeding 0.2wt%). Do not use water-soluble flux.

#### 2 Reflow Soldering Profile



#### 3 Soldering Iron

Reworking with electric soldering iron must preheating at  $150^{\circ}\text{C}$  for 1 minute is required, and do not directly touch the core with the tip of the soldering iron. The reworking soldering conditions are as follows

- ① Temperature of soldering iron tip:  $350^{\circ}\text{C}$  ;
- ② Soldering iron power output:  $\leq 30\text{W}$  ;
- ③ Diameter of soldering iron end:  $\leq 1.0\text{mm}$  ;
- ④ Soldering time:  $< 3\text{s}$