

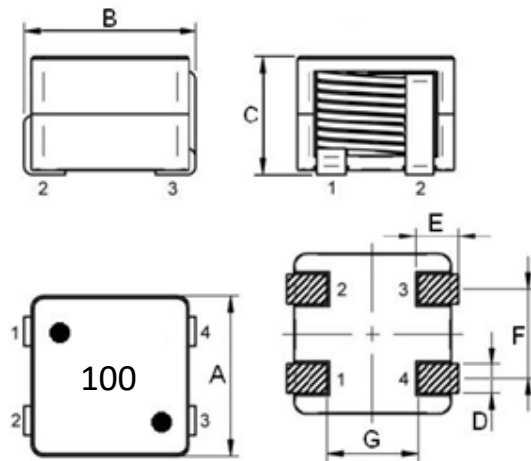
SPECIFICATION

ITEM	SMD, DUAL INDUCTOR, 10uH+-20%
FENG JUI P/N.	HFMPD1512-100MA
ELECTRICAL REQUIREMENTS	INDUCTANCE(N1, N2): 10uH±20% DCR(N1, N2): 15.30mΩ MAX Isat current: 20A (Drops 30% typ.) Irms current: 13A (ΔT=50°C typ.)

TEST METHOD:

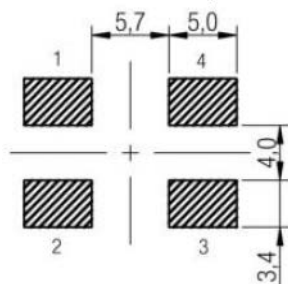
TEST EQUIPMENT	CH3302 / CH1320
TEST FREQUENCY	100kHz, 0.25V

DIMENSION : (UNIT:mm)

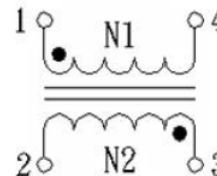


- A= 13.4±0.40m/m
- B= 15.5m/m MAX
- C= 12.5m/m MAX
- D= 2.40m/m REF.
- E= 3.20m/m REF.
- F= 7.40m/m REF.
- G= 7.60m/m REF.

LAND PATTERNS:



SCHEMATICS:



preliminary

APPROVED	CHECKED	CORRECT	DESIGNED

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RELIABILITY TEST

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.Y withstanding at below conditions.

Terminal should not peel off. (refer to figure at right)

5. 0N 60 sec.

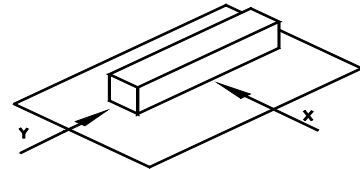


Figure 1

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 $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ (-25~+80°C degree Celsius)

inductance deviation within $\pm 5.0\%$, after 96 hours

7. 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.

8. 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.

9. Shock resistance

Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s^2 (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 environment

Storage condition: Temperature Range: 0°C ~ 35°C ; -40°C ~ 150°C (after PCB)

Humidity Range: 50% ~ 70% RH

12. Moisture Sensitivity Levels (MSL): Level I

Use components within 12 months. If 12 months or more have elapsed, check solderability before use.

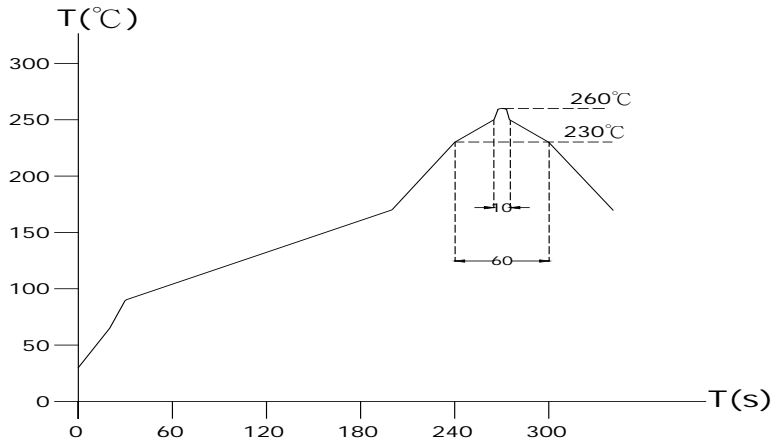
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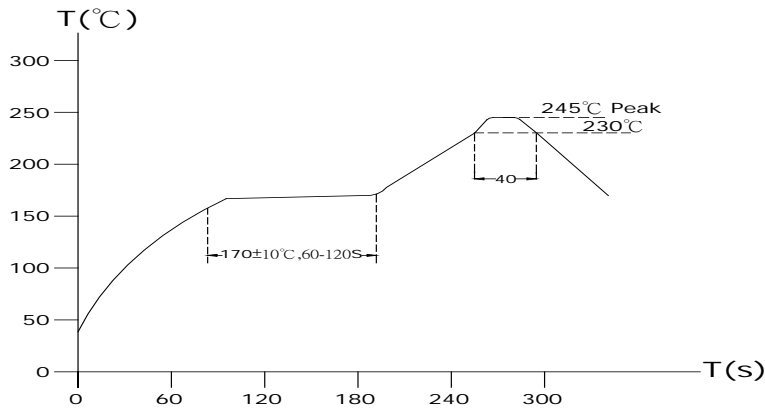
GENERAL CHARACTERISTICS

Lead-free heat endurance test



- ※The test should be made under the conditions according to the chart, after the test it is kept for 2hours under the normal temperature and humidity. Then,no mechanical and electrical defect should be found out.
- ※The reflow test can be done 5 times,but the interval should be more than one hour under the normal conditions.(The component must be able to withstand soldering profiles with peak temperatures of 250°C for 20 seconds for 5 times.)
- ※The reflow test conditions are based on the testing instruments available in our company.

Lead-free the recommended reflow condition



- ※The reflow condition recommended above is according to the machine used by our company. Big differences will arise as a result of the type of machine ,reflow conditions,method,etc used. Hence,before setting up your reflow conditions,please confirm with the above.

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