

## ■ Features

- High rated current for circuit design.
- Design by special lead wire to prevent open circuit failure.
- Low cost with rugged reliability and performance fixed inductor.
- Operating temperature:  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ .

## ■ Applications

- TVs and Audio equipment.
- Notebook, Inkjet printer, Copying machine, Display monitor, Cellular phone.
- Switching Power Supply.
- Excellent as DC/DC converter boost or buck inductor.

## ■ Product Identification

$\frac{\text{YDPK}}{(1)}$ 
 $\frac{\square\square\square\square}{(2)}$ 
 $-\frac{\square\square\square}{(3)}$ 
 $\frac{\square}{(4)}$

(1) : Type

(2) : Dimensions

(3) : Inductance value

(4): Inductance Tolerance: N=±30%, M=±20%, K=±10%

## ■ Shapes and Dimensions (Unit: mm)



| TYPE     | A Max. | B Max. | C        | D        | E       | F       |
|----------|--------|--------|----------|----------|---------|---------|
| YDPK0608 | 12.0   | 8.0    | 17.0±2.0 | 17.0±2.0 | 3.0±0.5 | 0.6±0.1 |

## ■ Electrical specification

| Part Number   | Inductance (mH) | Test Frequency | Max.DCR (Ω) | Isat (A) |
|---------------|-----------------|----------------|-------------|----------|
| YDPK0608-313K | 31±10%          | 1KHz/0.25V     | 115         | 0.03     |

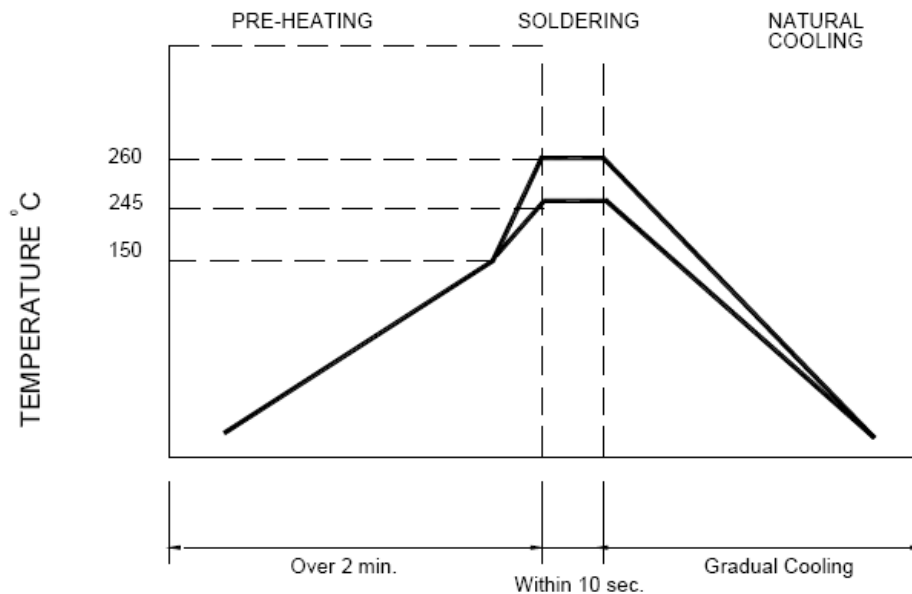
※ Design as Customer's Requested Specifications.

## ■ Reliability test

| NO. | Items                             | Test Methods                                                                                                                        | Requirements                                                                                  |
|-----|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| 1   | Lead terminal strength            | A static pulling force of 5N in a direction parallel to the lead terminals for 60±5 seconds.                                        | No terminal breakage or loosening.                                                            |
| 2   | Resistance to soldering heat test | Fix the samples on a 1.6mm thickness PCB, then dip the sample leads into a soldering bath of 270±5°C up to the PCB for 5±1 seconds. | No significant abnormality in appearance. Deviation relative to initial value: L: Within ±10% |
| 3   | Solder ability test               | Immerse the terminal in flux for 5 seconds. Then dip the terminal into a soldering bath of 245±5°C for 2±0.5 seconds.               | At least 90% of terminal electrode is covered by new solder.                                  |
| 4   | Humidity test                     | Temperature: 40°C±2°C<br>Humidity: 90%~95%RH<br>Duration: 96±4 Hours                                                                | No significant abnormality in appearance. Deviation relative to initial value: L: Within ±10% |
| 5   | High temperature storage test     | Temperature: 85°C±2°C<br>Duration: 96±4 Hours                                                                                       | No significant abnormality in appearance. Deviation relative to initial value: L: Within ±10% |
| 6   | Low temperature storage test      | Temperature: -25°C±2°C<br>Time: 96±4 Hours                                                                                          | No significant abnormality in appearance. Deviation relative to initial value: L: Within ±10% |
| 7   | Thermal shock test                | First -25±5°C for 30±3 minutes, last 85±5°C 30±3 minutes as 1 cycles. Go through 10 cycles.                                         | No significant abnormality in appearance. Deviation relative to initial value: L: Within ±10% |

## ■ Soldering Conditions

Wave Soldering:



Note:

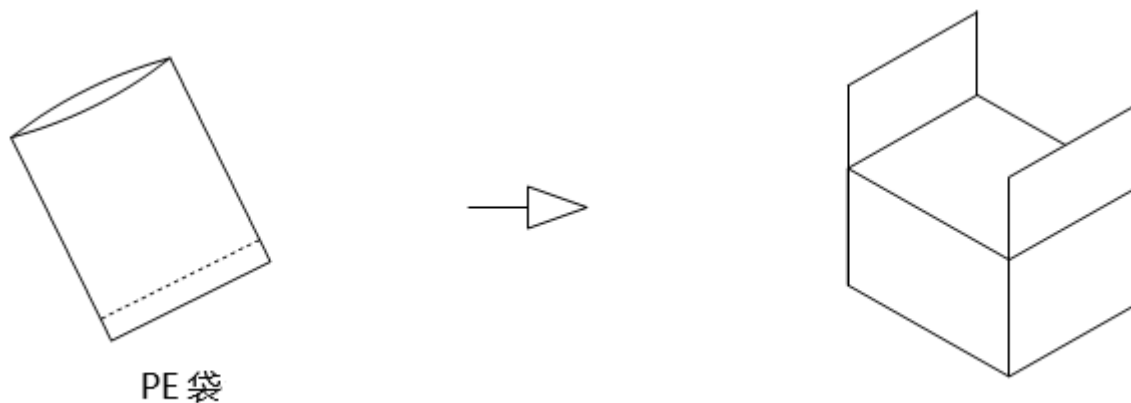
Never contact the ceramic with the iron tip

1.0mm tip diameter(max)

## ■ Material list

| NO      | ITEM  | DESCRIPTION          | SUPPLIER | RATING | UL FILE |
|---------|-------|----------------------|----------|--------|---------|
| 1       | Core  | DR2W 6×8.3           | JIACI    |        |         |
|         |       | OR EQUIVALENT        |          |        |         |
| 2       | Wire  | QA-1 $\phi$ 0.06mm N | YIDA     | 155°C  | E344055 |
|         |       | OR EQUIVALENT        |          |        |         |
| 3       | TUBE  | T-2 UL(Black)        | QUANTAI  | 125°C  | E227336 |
|         |       | OR EQUIVALENT        |          |        |         |
| 4       | PIN   | CP $\Phi$ 0.6mm      | BAICHUAN |        |         |
| 5       | EPOXY | 7204/H               | FUFAN    |        |         |
| REMARK: |       |                      |          |        |         |

**■ Package specification**



| Type     | Quantity(pcs) |            |           | Remark |
|----------|---------------|------------|-----------|--------|
|          | Bag           | Inside box | Outer box |        |
| YDPK0608 | 500           | 5000       | 10000     |        |