## ■ 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℃ ~ +125℃.

## ■ 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

YDPK □□□□ – □□□ □

(1) (2) (3) (4)

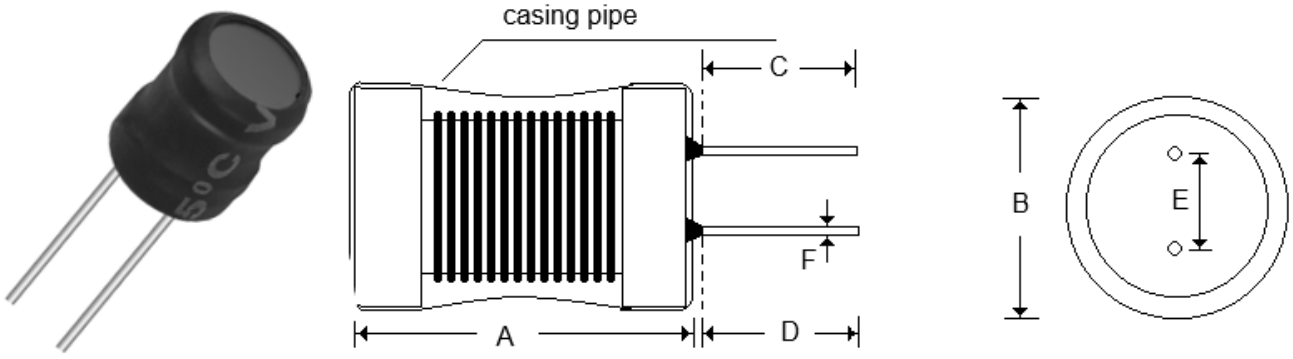
(1)： Type

(2)： Dimensions

(3)： Inductance value

(4)：Inductance Tolerance：N=±30%,M=±20%，K=±10%，J=±5%

## ■ Shapes and Dimensions (Unit：mm)




| TYPE | A Max. | B Max. | C | D | E | F |
|---|---|---|---|---|---|---|
| YDPK0810 | 13.0 | 10.0 | 26.0±2.0 | 26.0±2.0 | 5.0±0.5 | 0.6±0.1 |

## ■ Electrical specification

| Part Number | Inductance (mH) | Test Frequency | Max.DCR (Ω) | Isat (mA) |
|---|---|---|---|---|
| YDPK0810-682K | 6.8±10% | 1KHz/0.25V | 12 | 100 |

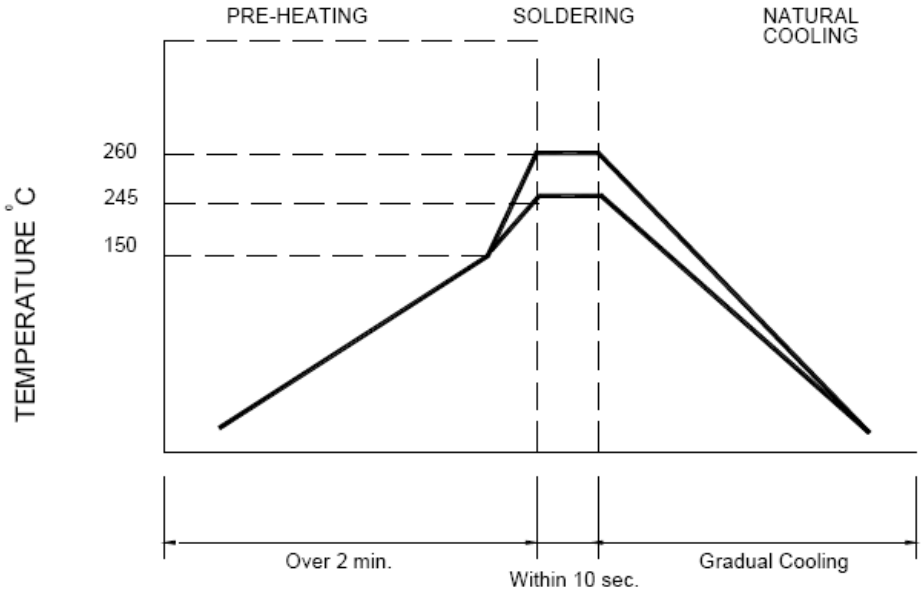
※ Design as Customer's Requested Specifications.

## ■ Reliability test

| NO. | Items | Test Methods | Requirements |
|---|---|---|---|
| 1 | Lead terminalstrength | A static pulling force of 5N in a direction parallel tothe lead terminals for 60±5 seconds. | No terminal breakage orloosening. |
| 2 | Resistance tosoldering heattest | Fix the samples on a 1.6mm thickness PCB,then dip thesample leads into a soldering bath of 270±5℃ up tothe PCB for 5±1 seconds. | No significant abnormality inappearance.Deviation relative toinitial value:L:Within ±10% |
| 3 | Solder abilitytest | Immerse the terminal in flux for 5 seconds. Then dipthe terminal into a soldering bath of 245±5℃ for 2±0.5 seconds. | At least 90% of terminalelectrode is covered by newsolder. |
| 4 | Humidity test | Temperature:40℃±2℃<br>Humidity :90%～95%RH<br>Duration:96±4 Hours | No significant abnormality inappearance.Deviation relative toinitial value:L:Within ±10% |
| 5 | Hightemperaturestroage test | Emperature:85℃±2℃<br>Duration :96±4 Hours | No significant abnormality inappearance.Deviation relative toinitial value:L:Within ±10% |
| 6 | Lowtemperaturestorage test | Temperature :-25℃±2℃<br>Time:96±4 Hours | No significant abnormality inappearance.Deviation relative toinitial value:L:Within ±10% |
| 7 | Thermal shocktest | First -25±5℃ for 30±3 minutes，last 85±5 ℃ 30±3minutes as 1 cycles. Go through 10 cycles. | No significant abnormality inappearance.Deviation relative toinitial value:L:Within ±10% |

## ■ Soldering Conditions

Wave Soldering:




Note:

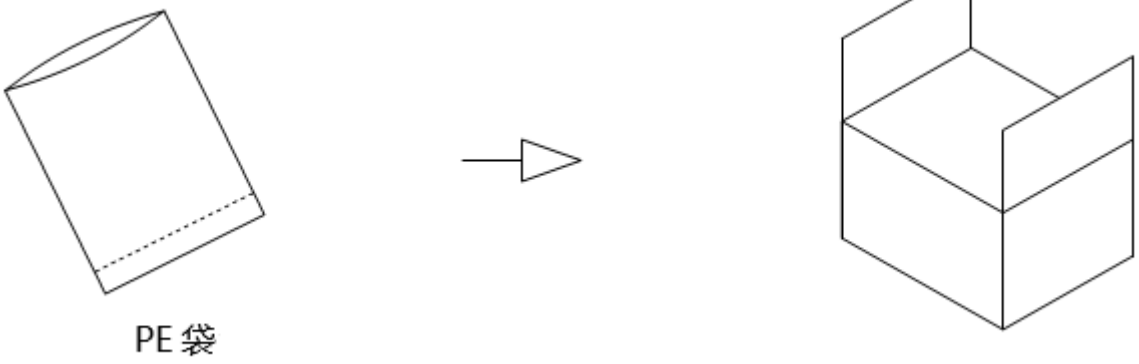
Never contact the ceramic with the iron tip

1.0mm tip diameter(max)

## ■ Material list

| NO | ITEM | DESCRIPTION | SUPPLIER | RATING | UL FILE |
|---|---|---|---|---|---|
| 1 | Core | SR53 DR2W 8×10 | SUNRISE | | |
| | | OR EQUIVALENT | | | |
| 2 | Wire | QA-1 Φ0.15mm | JINYAN | 155℃ | E238500 |
| | | OR EQUIVALENT | | | |
| 3 | TUBE | T-2 UL(Black) | QUANTAI | 125℃ | E227336 |
| | | OR EQUIVALENT | | | |
| 4 | PIN | CP Φ0.6mm | BAICHUAN | | |
| 5 | VARNISH | DA-700-6 | QIANGDA | 130℃ | E347463 |
| REMARK: | | | | | |

## ■ Package specification




| Type | Quantity(pcs) | | | Remark |
|---|---|---|---|---|
| | Bag | Inside box | Outer box | |
| YDPK0810 | 250 | 2500 | 5000 | |