

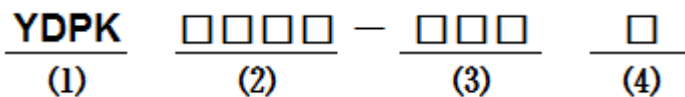
■ Features

- 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



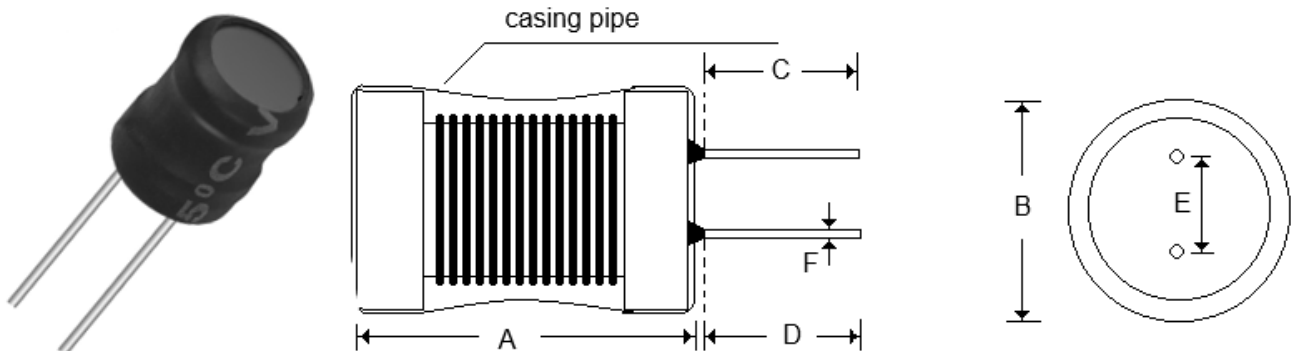
(1) : Type

(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 | 13.0±2.0 | 13.0±2.0 | 3.0±0.5 | 0.6±0.1 |

■ Electrical specification

| Part Number | Inductance (uH) | Test Frequency | Max.DCR (mΩ) | Isat (A) |
|---------------|-----------------|----------------|--------------|----------|
| YDPK0608-500K | 50±10% | 1KHz/0.25V | 210 | 1.1 |

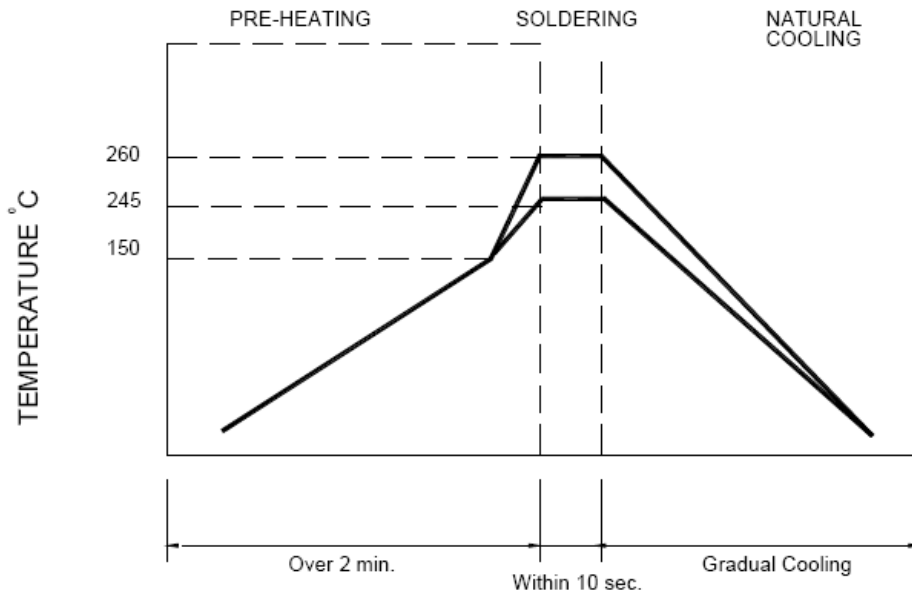
※ Design as Customer's Requested Specifications.

■ 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 Humidity : 90%~95%RH 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 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 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:

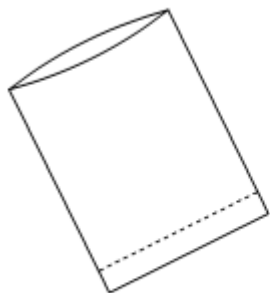
Never contact the ceramic with the iron tip

1.0mm tip diameter(max)

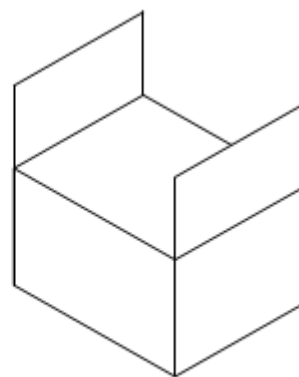
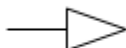
■ Material list

| NO | ITEM | DESCRIPTION | SUPPLIER | RATING | UL FILE |
|---------|------|-------------------------------|----------|--------|---------|
| 1 | Core | SR60 DR2W 6×8 | SUNRISE | | |
| | | OR EQUIVALENT | | | |
| 2 | Wire | QA-1 ϕ 0.30mm | JINYAN | 155°C | E238500 |
| | | OR EQUIVALENT | | | |
| 3 | TUBE | T-2 ϕ 7*10.5mm UL(Black) | QUNAITAI | 125°C | E227336 |
| | | OR EQUIVALENT | | | |
| 4 | PIN | CP ϕ 0.6mm | BAICHUAN | | |
| REMARK: | | | | | |

■ Package specification



PE 袋



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