

■ 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%, J=±5%

■ Shapes and Dimensions (Unit: mm)



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

■ Electrical specification

Part Number	Inductance (mH)	Test Frequency	Max.DCR (Ω)	Isat (mA)
YDPK0810-104K	100 $\pm$ 10%	1KHz/0.25V	200	20

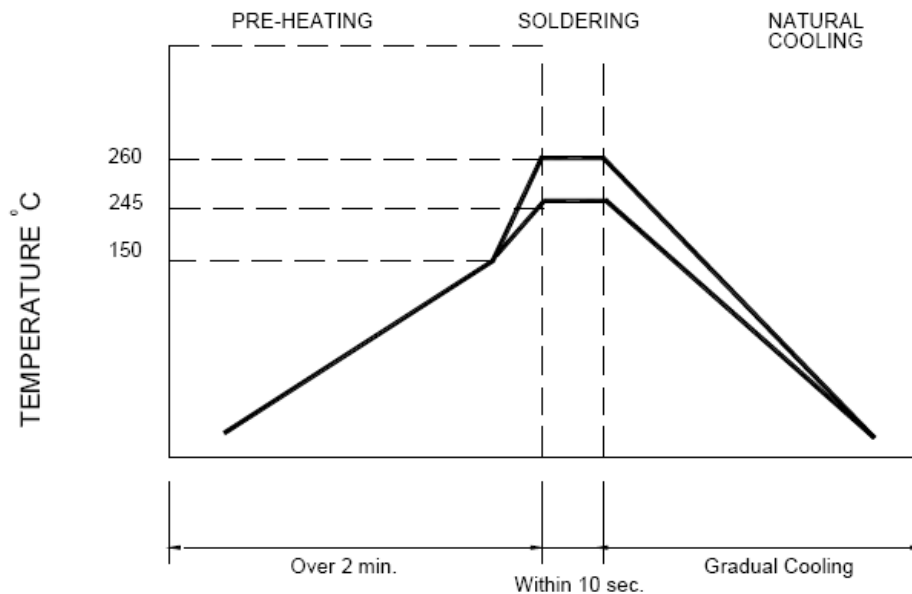
※ Design as Customer's Requested Specifications.

■ 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 $\pm$ 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 $\pm$ 5 $^{\circ}$ C up to the PCB for 5 $\pm$ 1 seconds.	No significant abnormality in appearance. Deviation relative to initial value: L: Within $\pm$ 10%
3	Solder ability test	Immerse the terminal in flux for 5 seconds. Then dip the terminal into a soldering bath of 245 $\pm$ 5 $^{\circ}$ C for 2 $\pm$ 0.5 seconds.	At least 90% of terminal electrode is covered by new solder.
4	Humidity test	Temperature: 40 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C Humidity: 90% $\sim$ 95%RH Duration: 96 $\pm$ 4 Hours	No significant abnormality in appearance. Deviation relative to initial value: L: Within $\pm$ 10%
5	High temperature storage test	Temperature: 85 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C Duration: 96 $\pm$ 4 Hours	No significant abnormality in appearance. Deviation relative to initial value: L: Within $\pm$ 10%
6	Low temperature storage test	Temperature: -25 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C Time: 96 $\pm$ 4 Hours	No significant abnormality in appearance. Deviation relative to initial value: L: Within $\pm$ 10%
7	Thermal shock test	First -25 $\pm$ 5 $^{\circ}$ C for 30 $\pm$ 3 minutes, last 85 $\pm$ 5 $^{\circ}$ C 30 $\pm$ 3 minutes as 1 cycles. Go through 10 cycles.	No significant abnormality in appearance. Deviation relative to initial value: L: Within $\pm$ 10%

■ Soldering Conditions

Wave Soldering:



Note:

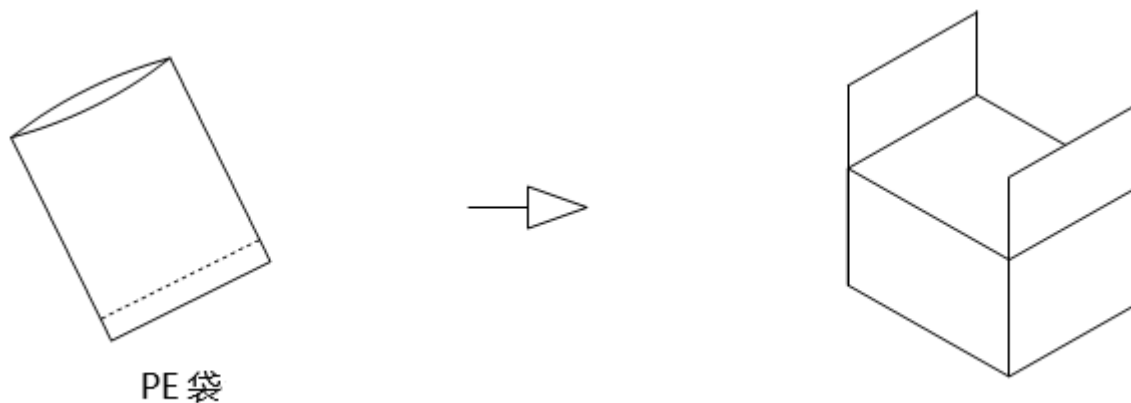
Never contact the ceramic with the iron tip

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 ϕ 0.07mm N	YIDA	155°C	E344055
		OR EQUIVALENT			
3	TUBE	T-2 UL(Black)	QUANTAI	125°C	E227336
		OR EQUIVALENT			
4	PIN	CP Φ 0.6mm	BAICHUAN		
5	EPOXY	BSA-7204/H(Black)	FUFAN		
REMARK:					

■ Package specification



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