

■ 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
YDPK0912	15.0	11.0	18.0±2.0	18.0±2.0	5.0±0.5	0.8±0.1

■ Electrical specification

Part Number	Inductance (uH)	Test Frequency	Max.DCR (mΩ)	Isat (A)
YDPK0912-470K	47±10%	1KHz/0.25V	115	3.0

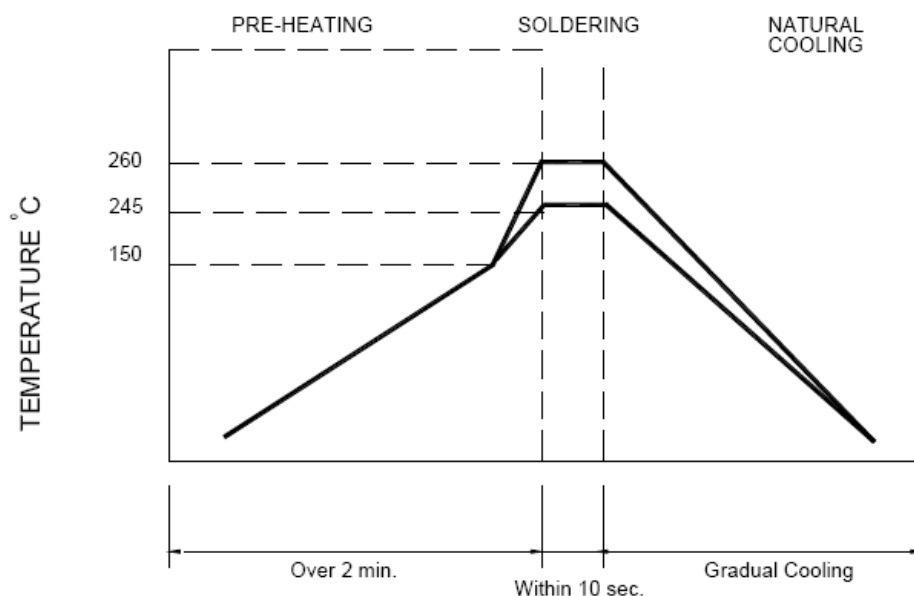
※ Design as Customer's Requested Specifications.

■ 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:



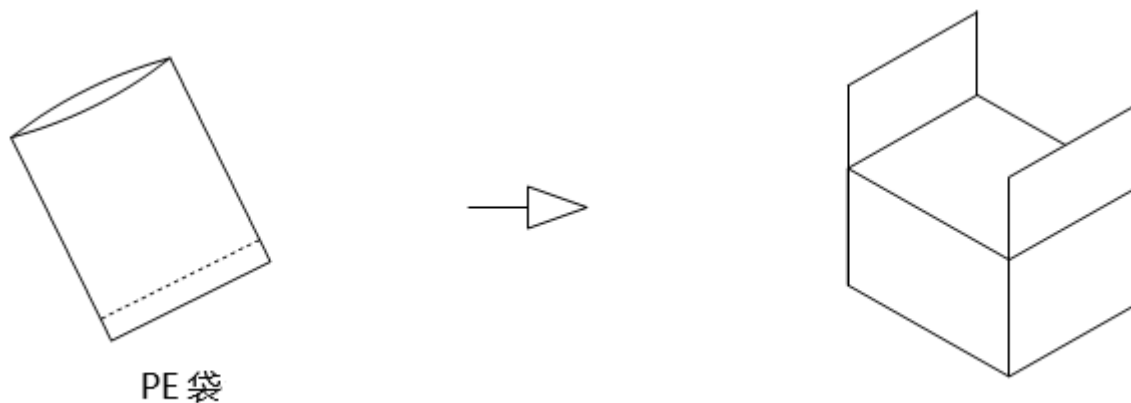
Note:

Never contact the ceramic with the iron tip

1.0mm tip diameter(max)

■ Material list

NO	ITEM	DESCRIPTION	SUPPLIER	RATING	UL FILE
1	Core	J8H DR2W 9×12	JIACI		
		OR EQUIVALENT			
2	Wire	2UEWF ϕ 0.50mm	PROSPERITY	155°C	E196072
		OR EQUIVALENT			
3	TUBE	T-2 UL(Black)	QUANTAI	125°C	E227336
		OR EQUIVALENT			
4	PIN	TCW Φ 0.8mm	MINGTONG		
REMARK:					

■ Package specification

Type	Quantity(pcs)			Remark
	Bag	Inside box	Outer box	
YDPK0912	200	2000	4000	