

■ 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

$\frac{\text{YDPK}}{(1)} \quad \frac{\square\square\square\square}{(2)} - \frac{\square\square\square}{(3)} \quad \frac{\square}{(4)} - \frac{\square\square}{(5)}$

(1) : Type

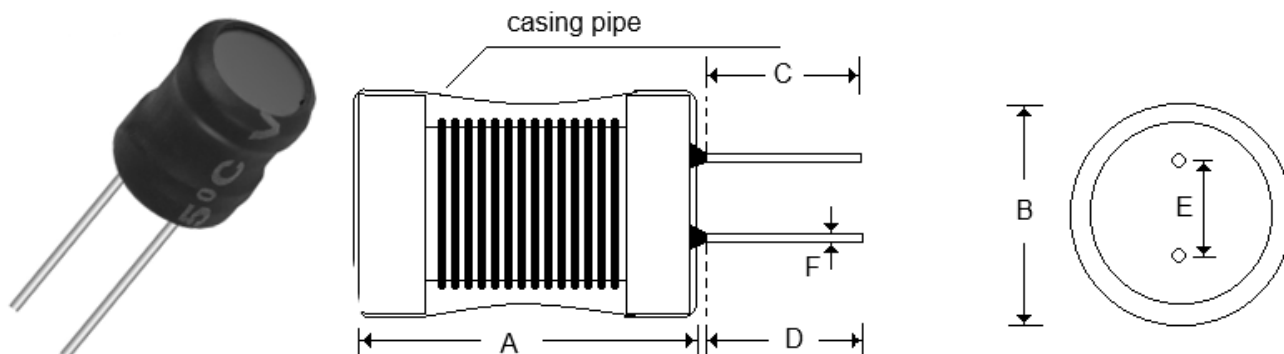
(2) : Dimensions

(3) : Inductance value

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

(5) : Identification code: NY= Pressure resistant products

■ Shapes and Dimensions (Unit: mm)



TYPE	A Max.	B Max.	C	D	E	F
YDPK1012	14.0	12.0	18.0±2.0	18.0±2.0	6.0±0.5	0.65±0.1

■ Electrical specification

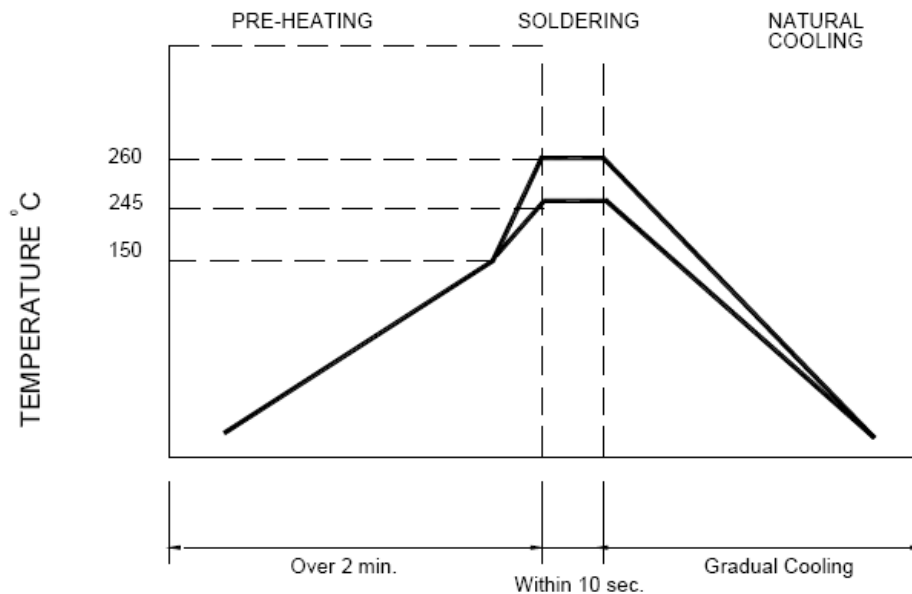
ITEM	SPEC.RANGE	TEST CONDITION	TEST INSTRUMENTS
L	1.0mH±10%	1KHz/0.3V	TH2828
Isat	0.65A	L Drop≤30%, 1KHz/0.3V	TH1778A+TH2829A
Irms	0.70A	△T≤40℃, 1KHz/0.3V	TH1778A+TH2829A
DCR	1.0Ω Max.	25℃	502BC
Interturn withstand voltage	No sparking/arcing or breakdown	1000V	U9912

■ 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℃ 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℃ for 2±0.5 seconds.	At least 90% of terminal electrode is covered by new solder.
4	Humidity test	Temperature: 40℃±2℃ 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℃±2℃ Duration : 96±4 Hours	No significant abnormality in appearance. Deviation relative to initial value: L: Within ±10%
6	Low temperature storage test	Temperature : -25℃±2℃ Time: 96±4 Hours	No significant abnormality in appearance. Deviation relative to initial value: L: Within ±10%
7	Thermal shock test	First -25±5℃ for 30±3 minutes, last 85±5℃ 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:



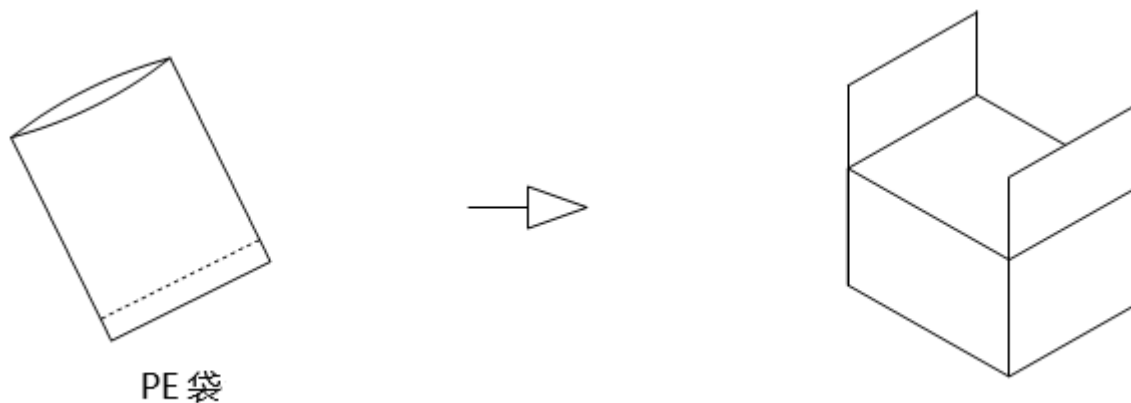
Note:

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 10×12	SME		
		OR EQUIVALENT			
2	Wire	QA-1 ϕ 0.30mm	JF	155°C	E238500
		OR EQUIVALENT			
3	TUBE	T-2 UL(Black)	QT	125°C	E227336
		OR EQUIVALENT			
4	PIN	CP Φ 0.65mm	BC		
REMARK:					

■ Package specification

Type	Quantity(pcs)			Remark
	Bag	Inside box	Outer box	
YDPK1012	100	1000	2000	