

■ 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

YDPKS □□□□ — □□□ □
 (1) (2) (3) (4)

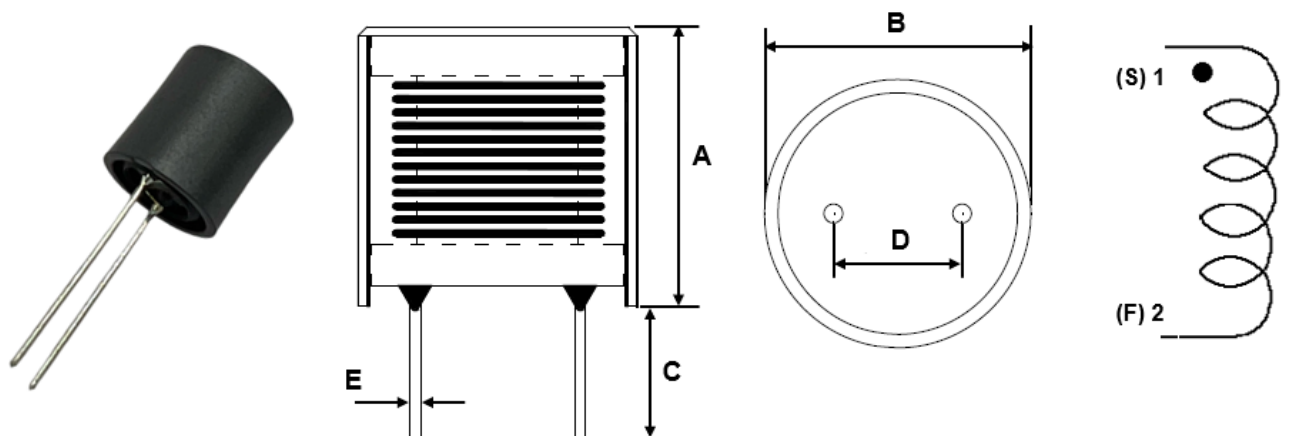
(1) : Type

(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
YDPKS1012	12.5	11.0	17.0 ± 2.0	5.0 ± 0.5	0.6 ± 0.1

■ Electrical specification

Part Number	Inductance (mH)	Test Frequency	Max.DCR (Ω)	Isat (A)
YDPKS1012-102M	1.0 $\pm$ 20%	1KHz/0.25V	2.10	0.35

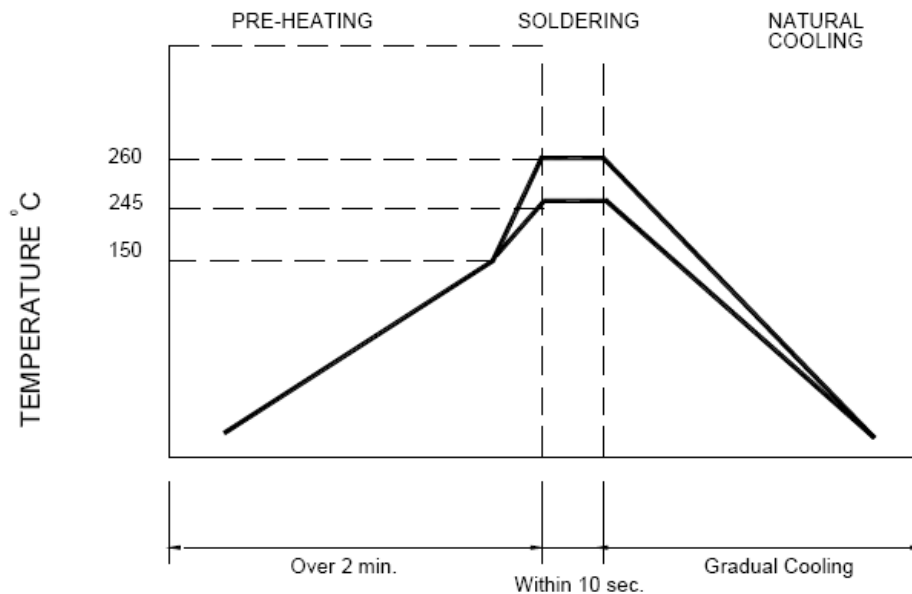
※ Design as Customer's Requested Specifications.

■ 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%~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:



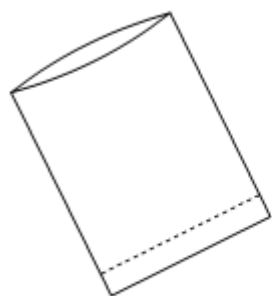
Note:

Never contact the ceramic with the iron tip

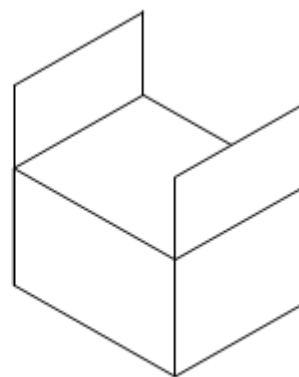
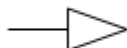
1.0mm tip diameter(max)

■ Material list

NO	ITEM	DESCRIPTION	SUPPLIER	RATING	UL FILE
1	CORE	DR2W 7.5×8.4	HC		
		OR EQUIVALENT			
2	CASE	P 10.5×11.8×8.7	HC		
		OR EQUIVALENT			
3	WIRE	QA-1 φ0.19mm	JY	155°C	E238500
		OR EQUIVALENT			
4	TUBE	T-2 UL(Black)	QT	125°C	E227336
		OR EQUIVALENT			
5	PIN	CP Φ0.60mm	BC		
6	EPOXY	BSA-7204H(Black)	FF		
REMARK:					

■ Package specification

PE 袋



Type	Quantity(pcs)			Remark
	Bag	Inside box	Outer box	
YDPKS1012	100	1000	2000	