

# S P E C I F I C A T I O N

## APPLICATION FOR APPROVAL OF

- ITEM : RADIAL INDUCTOR ■
- DESCRIPTION : DR 8 x 8mm ■
- CODE NO : DR4) 4.7mH (BULK & TAPPING) ■
- MODEL NO : \_\_\_\_\_ ■

This space is used for customer's approval

■ DATE : 2010.12.08. ■

DRAWN BY M . Y . JEON	DATA 2010.12.08.
CHECKED BY	DATA
APPROVED BY J . G . KIM	DATA 2010.12.08.

CUSTOMER : \_\_\_\_\_

# SPECIFICATION

SHEET NO.

1 OF 9

DATE

2010.12.08

PART NAME

RADIAL INDUCTOR

MODEL NAME

DR4)4.7mH(472)

PART NO.

DESCRIPTION

DR 8X8 4.7mH

## 1. GENERAL SPECIFICATION

### 1) SCOPE

This specification applies to part number 4.7mH PEAKING COIL for use in electronic appliances which is supplied for

## 2. MECHANICAL CHARACTERISTIC

PEAKING COIL shall conform in size, dimension, and other mechanical properties, to the part drawing attached here to.

### 1) Marking

PEAKING COIL shall be permanently and legibly marked with the part number on the specification position.

### 2) Terminal strength

Terminal shall withstand for 30 seconds without breakdown on losing when a static load of 2 Kg is applied in the drawing direction to the terminal at the point where the external load.

## 3. ENVIRONMENTAL & LIFECHARACTERISTIC

### 1) Temperature rise

Temperature rise of the each winding and core shall be less than ambient + 65°C , when the PEAKING COIL continuously operated at full load(test load) until constant temperature is attained.

### 2) Heat-resistance

Immediately after PEAKING COIL being placed in room for 96 Hours maintained AT 105°C ± 2°C ambient temperature, the PEAKING COIL shall conform with the above part paragraph (4) and also insulation resistance shall be more than 100 MΩ.

### 3) Moisture resistance



Immediately after PEAKING COIL being placed in room for 120 Hours in such humidity chamber this is maintained at 90 - 95% relative humidity and 55°C ± 2°C temperature and wipped a drop of water, PEAKING COIL shall conform with the above paragraph(4) and also insulation shall be the 10 MΩ.

### 4) Safety consideration

PEAKING COIL shall meet all the requirements subject to IEC-950 standards for safety of information technology equipment including electrical business equipment.

### 5) Solderability

Dip pads in RMA flux, 96.5/0.5/3 solder (Sn/Cu/Ag)at 260°C for 5±2 seconds

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DR 8X8 4.7mH

## 4. APPEARANCE & DIMENSION (UNIT:m/m)

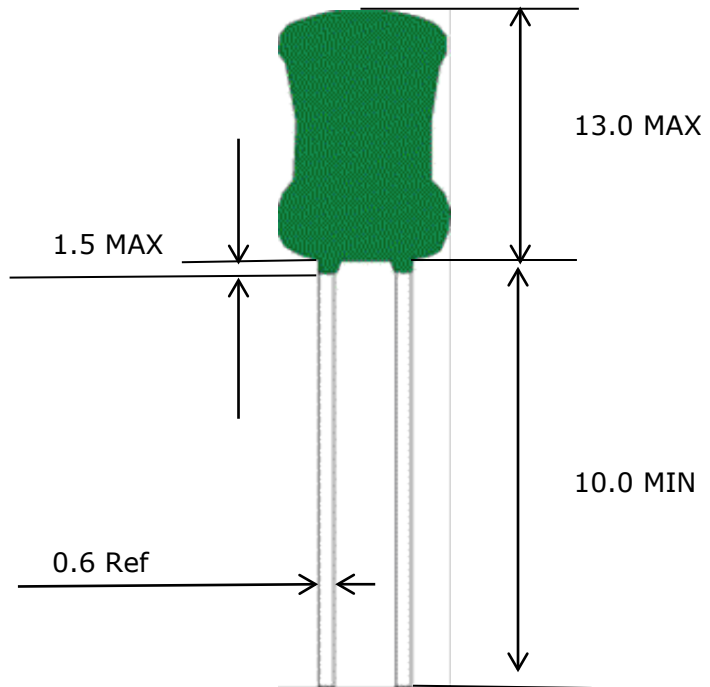
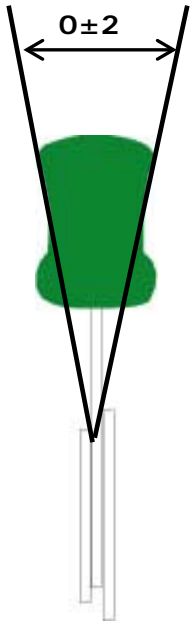
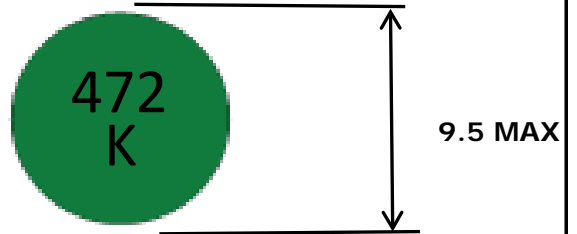
<Taping type>

EPOXY COLOR

GREEN

\*MARKING :472 OR 472K

<TOP VIEW>



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# SPECIFICATION

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PART NAME RADIAL INDUCTOR MODEL NAME DR4)4.7mH(472)

PART NO. DESCRIPTION DR 8X8 4.7mH

## 5. WINDING SPEC

	TYPE OF WIRE	TURNS	WINDING METHODE
START & FINISH	2UEW 0.12Φ	352.5Ts REF	SOLENOID WINDING [C . C . W]

## 6. ELECTRICAL CHARACTERISTIC

NO	ITEM	MESURE	SPECIFICATION	REMARKS
1	INDUCTANCE	START & FINISH	4.7[mH] ± 10%	HIOKI3522 LCR METER at 1kHz 1V
2	DC RESISTANCE	START & FINISH	10.12[Ω] MAX	WHEATSTONE BRIDGE TYPE 2755
3	DIELECTRIC WITHSTANDING TEST	START & FINISH	AC 1 [KV] , FREQUANCY 60 [Hz] , 1 MINUTES, CUT OFF CURENT 2 [mA]	NO BREAKDOWN HPT-5010
4	INSULATION RESISTANCE	START & FINISH	DC 500 [V] , 100 [MΩ] MIN	DM-500AD

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# SPECIFICATION

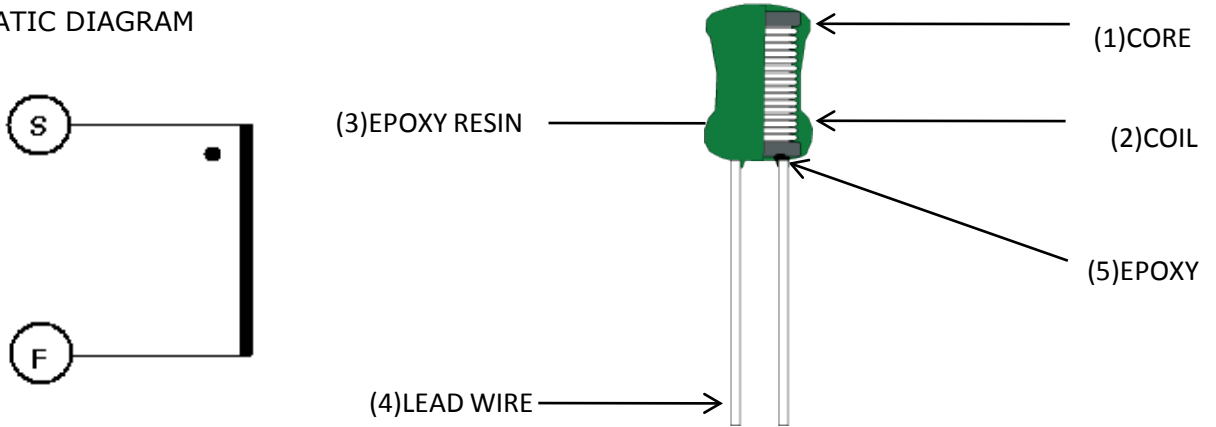
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PART NAME RADIAL INDUCTOR MODEL NAME DR4)4.7mH(472)

PART NO. DESCRIPTION DR 8X8 4.7mH

## 7. SCHEMATIC DIAGRAM



## 8. MATERIAL LIST

NO	ITEM	MATERIAL & DIMENSION	MANUFACTURE	REMARK
1	CORE	JA3 DR 8X8mm	JIACI(ZHUHAI)ELECTRONICS CO.,LTD.	EQV
2	WIRE	2UEW 0.12Φ	DONG YANG ELECTRONICS CO., LTD. CHUNHUI ELECTRICAL APPLANCES CO.,LTD.	E102761S E198440 EQV
3	EPOXY RESIN	EPI-CHEM 930HF	SAMSIN CHEMICAL CO.,LTD.	EQV
4	LEAD WIRE	TPCS 0.6Φ COPPER WIRE	SAMATRON CO.,LTD	EQV
5	EPOXY	EPI CHEM-2001HS FK661	SAMSIN CHEMICAL CO.,LTD. QIFU ELECTRONIC MATERIALS FACTORY	EQV
-	SOLDER BAR	HSE-09 SN 100	HEESUNG MATERIAL LTD. JIAMENG CO.,LTD.	EQV
-	FLUX	F181 PF-120L	ZHUHAI FRIEND INDUSTRIAL CO.,LTD. SOLUX CO.,LTD.	EQV
-	INK	270BK	DOMINO KOREA CO.,LTD.	EQV

## 9. TABLE OF STANDARD CHARACTERISTICS OF MATERIALS

PROPEY UNIT	μiac	Bms	Br	WORKING	Tc
MATERIAL	±25%	GAUSS	GAUSS	Frequency(MHZ)	℃
JA3	300	2400	1300	0.1~2.0	150

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DR4)4.7mH(472)

PART NO.

DESCRIPTION

DR 8X8 4.7mH

10. REMARK-1 / DONG YANG [UL CARD]

Magnet Wire - Component

See General Information for Magnet Wire - Component

**DONG YANG ELECTRONICS IND CO LTD**



E102761

5-20 BANGYE-RI

MUNMAK-EUB

WONJU-SHI, KANGWON-DO 220-800 REPUBLIC OF KOREA

Mtl Dsg	Coat Typ		ANSI Type	TI
	BC	OC		
AI-EIW	Polyester-	Polyamide-	MW35	200
	imide	imide		
DSB-EIA	Ester-imide	Polyamide	MW76	180
DSB-EIA(S)	Solderable	Polyamide	MW78	180
	ester-imide			
EIW	Polyester-		MW30	180
	imide			
NY-EIW	Polyester-	Polyamide	MW76	180
	amide-imide			
NY-PEW	Polyester	Polyamide	MW24	155
NY-PEW(F)	Polyester	Polyamide	MW24	155
NY-UEW	Polyurethane	Polyamide	MW80,	155,
			MW28#	130
UEW(F)	Polyurethane	—	MW79,	155,

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RADIAL INDUCTOR

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DR4)4.7mH(472)

PART NO.

DESCRIPTION

DR 8X8 4.7mH

10. REMARK-2 / CHUN HUI [UL CARD]

## Magnet Wire - Component

See General Information for Magnet Wire - Component

**GUANGZHOU CHUNHUI ELECTRICAL**

E198440

**APPLIANCES CO LTD**

BLK 7, 8TH FL, ROOM H



JIANADA GARDEN

ZHONGSHAN DA DAO

GUANGZHOU, GUANGDONG 510665 CHINA

Mtl Dsg	Mark Dsg	Coat Type		ANSI Type	Temp Class
		BC	OC		
XUEW-UL@	(1)	Polyurethane	?/TD>	MW75	130

(1)-Marked designations are the same as the material designations.

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DATE

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PART NAME

RADIAL INDUCTOR

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DR4)4.7mH(472)

PART NO.

DESCRIPTION

DR 8X8 4.7mH

11-1. 표준제조 공정도

NO	공정명	도시기호	작업내용	적용자재		적용장비			점검				
				원자재	부자재	장비명	치구명	계측기	규격	주기	기록방법	관련규격	
1	PIN접착		*PIN을 CORE에 접착한다. 1)PIN에 EPOXY를 묻혀 CORE홀에 맞추어 삽입한다. 2)접착판에 제품을 정렬 시킨다.	CORE LEAD WIRE	EPOXY		접착판						작업표
2	건조		*EPOXY를 건조 시킨다. 1)접착판에 정렬된 제품을 건조기 안에 넣는다. 2)건조기의 온도를 150℃에 맞추어 30분 건조한다.			건조기		온도계	50℃±10℃	매일	제조설비 일일점검 일지		작업표
3	권선		*정렬권선을 실시한다. 1)권선기의 TURNS를 SPEC에 맞도록 맞춘다. 2)S-F를 SPEC에 맞도록 감는다.	COIL		반자동 권선기							작업표
4	배선		*배선을 실시한다. 1)PIN에 COIL을 감는다. 2)칼을 이용하여 COIL을 절단한다.					칼					작업표
5	납땀		*납땀을 실시한다. 1)제품을 자석판에 일렬로 붙인다. 2)자석판의 제품을 프릭스에 5~10m 문힌다. 3)반자동 납땀기에 제품을 올려 놓는다. 4)납땀기 온도를 450℃에 놓고 2~3초간 납땀한다.	동납	프릭스	반자동 납땀기	자석판	온도계	50℃±10℃	매일	제조설비 일일점검 일지		작업표
6	몰딩		*몰딩을 실시한다. 1)납땀된 제품을 종이 JIG에 올려놓고 종이 TAPE를 붙인다. 2)몰딩사각 JIG에 끼운다. 3)몰딩사각 JIG를 몰딩기에 올려놓고 2회 몰딩을 시킨다.	A.C.TAPE	몰딩 EPOXY	수동 몰딩기	종이JIG 몰딩 사각JIG						작업표
7	건조		*건조를 시킨다. 1)상온에서 자연건조를 3시간 시킨다. 2)건조기안에 몰딩한 제품을 넣고 140℃에서 60분 건조 시킨다. 3)종이 JIG에서 제품을 분리시킨다.			건조기		온도계	20℃±10℃	매일	제조설비 일일점검 일지		작업표
8	외관검사		*외관검사를 실시한다. 1)TAPING은 잘되었는지 검사한다. 2)몸체에 기포가 발생되었는지 검사한다. 3)기포가 발생되었으면 수리하여 준다.					육안	SPEC	전수			작업표

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PART NO.

DESCRIPTION

DR 8X8 4.7mH

11-2. 표준제조 공정도

NO	공정명	도시기호	작업내용	적용자재		적용장비			점검			
				원자재	부자재	장비명	치구명	계측기	규격	주기	기록방법	관련규격
9	특성검사		*특성검사를 실시한다. 1)검사기준서 SPEC에 맞추어 실시한다.					OSCILLO SCOPE	SPEC	전수		작업표
10	TAPING		*TAPING을 실시한다. 1)작업표에 테이핑 기준에 맞추어 실시한다.		접착테이프 대지	자동테이핑기			SPEC	매일	제조설비 일일점검 일지	작업표
11	특성검사		*특성검사를 실시한다. 1)특성검사 기준에 맞추어 실시한다.			자동측정기		LCR METER	SPEC	매일	제조설비 일일점검 일지	승인원
12	외관검사		*외관검사를 실시한다. 1)TAPING은 잘되었는지 검사한다. 2)FORMING이 잘 되었는지 검사한다. 3)몸체에 이상이 있으면 수리하여 준다.		교체용테이프	검사JIG 칼			SPEC	전수	성적서	승인원
13	포장		*포장을 실시한다. 1)작업표에 포장기준에 맞추어 실시한다.		포장BOX 포장재			저울				작업표
14	출하검사		*출하검사를 실시한다.					LCR/DCR Q METER 내압기 노기스	SPEC	SAMPLE	성적서	승인원
15	출하											

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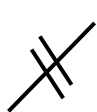

DESCRIPTION

DR 8X8 4.7mH

## 13. INSPECTION DATA

NO	INDUCTANCE	DC RESISTANCE	내전압	절연저항
SPEC	4.7mH ± 10%	10.12[Ω] MAX	AC 1KV 1분 MIN	DC 500V 100MΩMIN
1	4.62	7.6	OK	OK
2	4.61	7.6	OK	OK
3	4.63	7.6	OK	OK
4	4.63	7.6	OK	OK
5	4.61	7.6	OK	OK
6	4.62	7.6	OK	OK
7	4.63	7.61	OK	OK
8	4.63	7.6	OK	OK
9	4.61	7.6	OK	OK
10	4.62	7.6	OK	OK
X	4.621	7.601		
MIN	4.61	7.6		
MAX	4.63	7.61		

REMARK

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