

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

## APPLICATION FOR APPROVAL OF

- ITEM : RADIAL INDUCTOR ■
- DESCRIPTION : DR 8 x 11mm ■
- CODE NO : DR4A) 2.2uH(BULK & TAPPING) ■
- MODEL NO : ■

This space is used for customer's approval

■ DATE : 2015.11.10. ■

DRAWN BY M . Y . JEON	DATA 2015.11.10.
CHECKED BY	DATA
APPROVED BY J . G . KIM	DATA 2015.11.10.

CUSTOMER :

<b>SPECIFICATION</b>		SHEET NO.	1 OF 10
		DATA	2015.11.10.
PART NAME	RADIAL INDUCTOR	MODEL NAME	
PART NO.	DR4A-2.2uH-T.B	DESCRIPTION	DR 8 x 11mm

1. GENERAL SPECIFICATION

1) SCOPE

This specification applies to part number 2.2uH **RADIAL INDUCTOR(or 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 2Kg is applied in the drawing direction to the terminal at the point where the external load.

3. ENVIRONMENTAL & LIFE CHARACTERISTIC

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

4. OPERATING TRMPERATURE RANGE

-25°C TO + 85°C INCLUDING TTEMPERATURE RISE.

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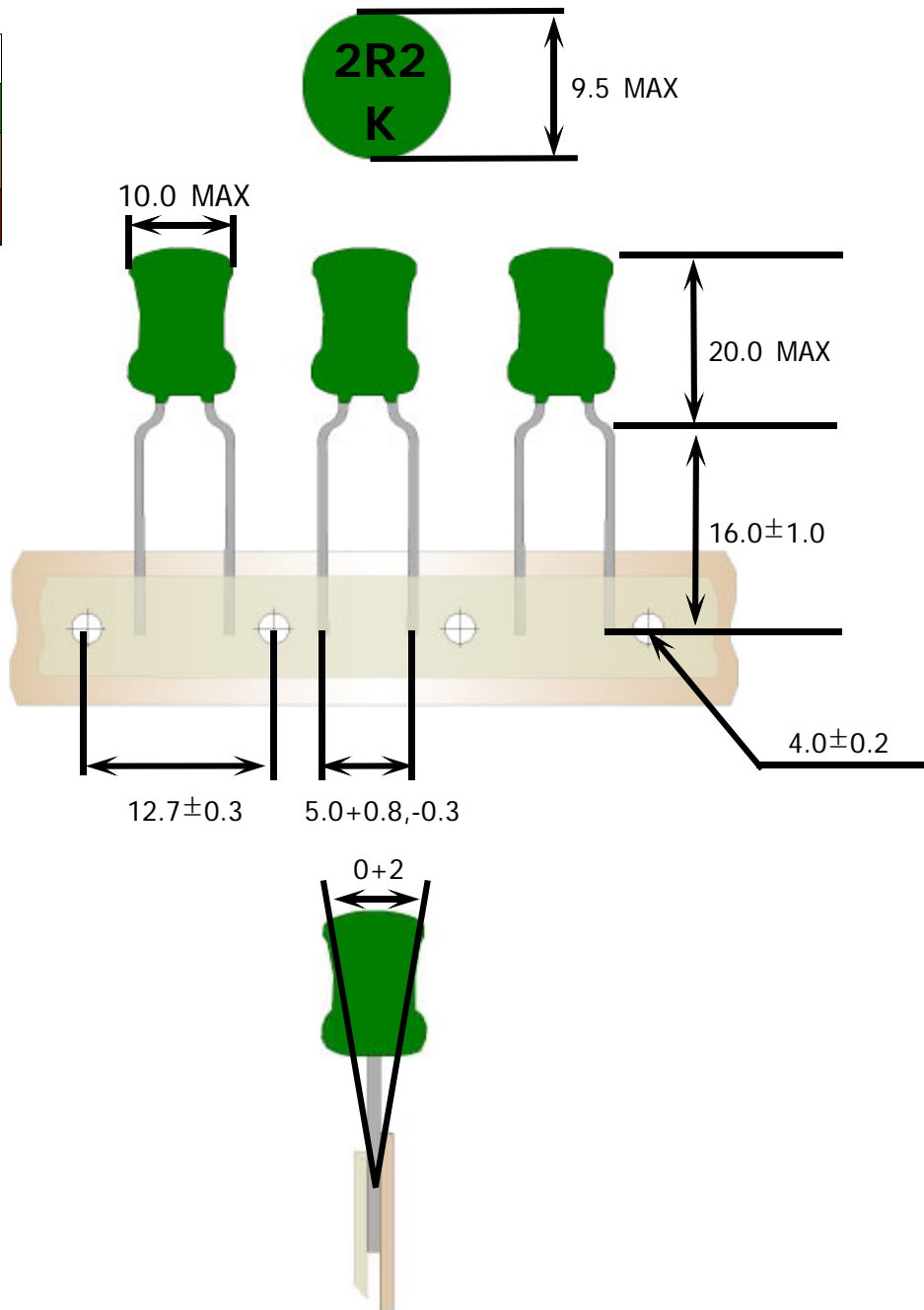
<b>SPECIFICATION</b>		SHEET NO.	2 OF 10
		DATA	2015.11.10.
PART NAME	RADIAL INDUCTOR	MODEL NAME	
PART NO.	DR4A-2.2uH-T.B	DESCRIPTION	DR 8 x 11mm

5-1. APPEARANCE & DIMENSION (UNIT:m/m)

MARKING : 2R2K or 2R2

**\* TAPING TYPE**

EPOXY COLOR
GREEN
BROWN
RED



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CUSTOMER :

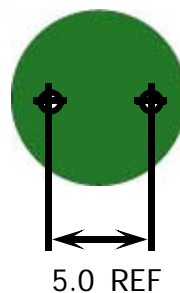
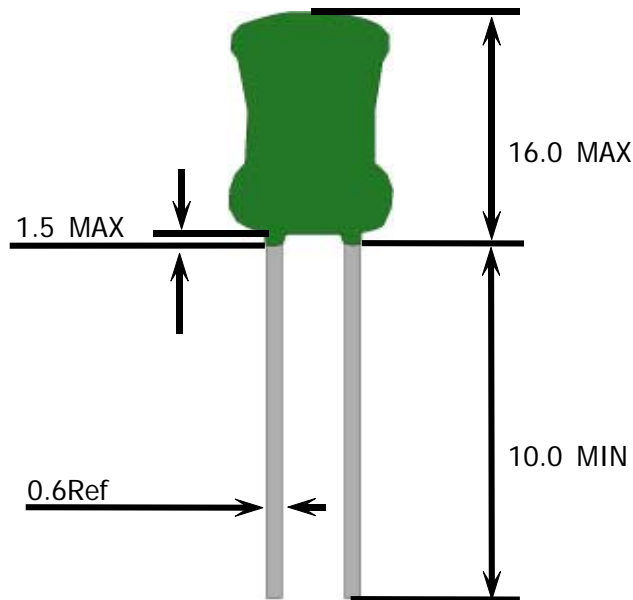
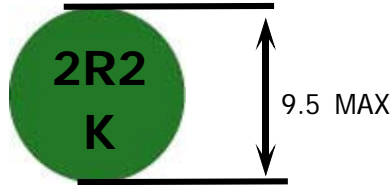
<b>SPECIFICATION</b>		SHEET NO.	3 OF 10
		DATA	2015.11.10.
PART NAME	RADIAL INDUCTOR	MODEL NAME	
PART NO.	DR4A-2.2uH-T.B	DESCRIPTION	DR 8 x 11mm

5-2. APPEARANCE & DIMENSION (UNIT:m/m)

MARKING : 2R2K or 2R2

\* BULK TYPE

EPOXY COLOR
GREEN
BROWN
RED



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CUSTOMER :

<b>SPECIFICATION</b>		SHEET NO.	4 OF 10
		DATA	2015.11.10.
PART NAME	RADIAL INDUCTOR	MODEL NAME	
PART NO.	DR4A-2.2uH-T.B	DESCRIPTION	DR 8 x 11mm

6. WINDING SPEC

START & FINISH	TYPE OF WIRE	T U R N S	WINDING METHODE
	2UEW 0.6Φ	8.5_Ts REF	SOLENOID WINDING [C . C . W]

7. ELECTRICAL CHARACTERISTIC

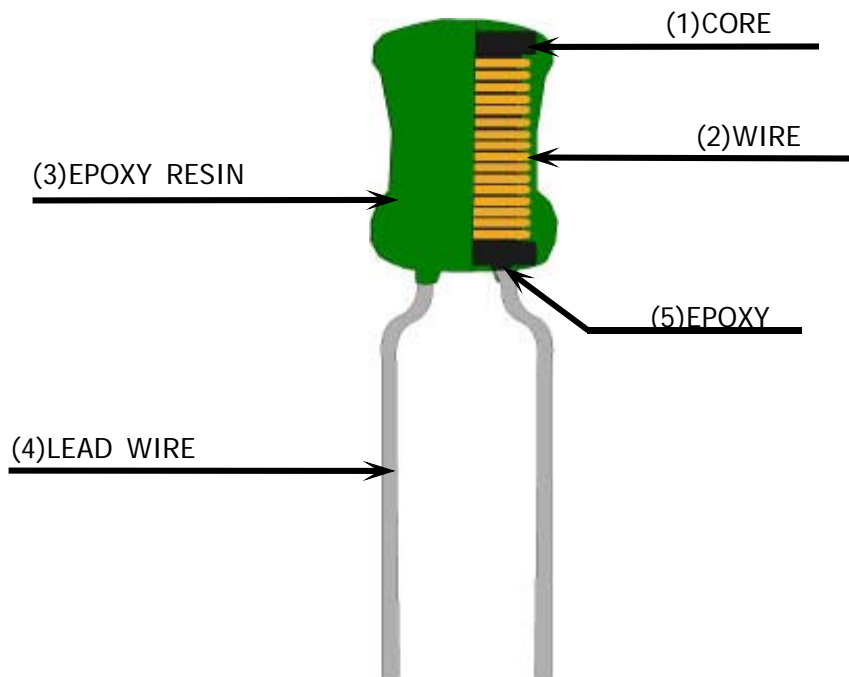
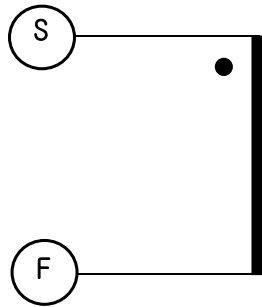
NO	I T E M	MESURE	SPECIFICATION	REMARKS
1	INDUCTANCE	START & FINISH	2.2 [uH] ± MIN	HIOKI3522 LCR METER at 1kHz 1V
2	DC RESISTANCE	START & FINISH	0.05 [Ω] MAX	WHEATSTONE BRIDGE TYPE 2755
3	DIELECTRIC WITHSTANDING TEST	COIL & CORE	AC 1 [KV] , FREQUANCY 60 [Hz] , 1 MINUTES, CUT OFF CURENT 2 [mA]	NO BREAKDOWN HPT-5010
4	INSULATION RESISTANCE	COIL & CORE	DC 500 [V] , 100 [MΩ] MIN	DM-500AD

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<b>SPECIFICATION</b>		SHEET NO.	5 OF 10
		DATA	2015.11.10.
PART NAME	RADIAL INDUCTOR	MODEL NAME	
PART NO.	DR4A-2.2uH-T.B	DESCRIPTION	DR 8 x 11mm

8. SCHEMATIC DIAGRAM



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CUSTOMER :

<b>SPECIFICATION</b>		SHEET NO.	6 OF 10
		DATA	2015.11.10.
PART NAME	RADIAL INDUCTOR	MODEL NAME	
PART NO.	DR4A-2.2uH-T.B	DESCRIPTION	DR 8 x 11mm

9. MATERIAL LIST

NO	ITEM	MATERIAL & DIMENSION	MANUFACTURE	REMARK
1	CORE	JA3 DR 6.5x7.5mm	CNI CABLE CO.,LTD. CHUNYI ELECTRICAL APPLANCES CO.,LTD.D.	E210918 E198440 EQV
2	WIRE	2UEW 0.045Ø	SAMSIN CHEMICAL CO.,LTD.	E232031 EQV
3	EPOXY RESIN	EPI-CHEM 930HF	KISTRON CO.,LTD YEHUA CO.,LTD.	EQV
4	LEAD WIRE	TPC 0.6Ø	SAMSIN CHEMICAL CO.,LTD. QUFU ELECTRONICS MATERIALS FACTORY	EQV
5	EPOXY	EPI CHEM-2001HS FK661	HEESUNG MATERIAL LTD. JIAMENG CO.,LTD.	EQV
-	SOLDER BAR	HSE-09 Sn100	ZHUHAI FRIEND INDUSTRIAL CO.,LTD.	EQV
-	FLUX	F181	DOMINO KOREA CO.,LTD. CANTON XING CHUANG CODING EQUIPMENT CO.,LTD.	EQV
-	INK	270BK HC-6519		

10. TABLE OF STANDARD CHARACTERISTICS OF MATERIALS

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

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CUSTOMER :

<b>SPECIFICATION</b>		SHEET NO.	7 OF 10
		DATA	2015.11.10.
PART NAME	RADIAL INDUCTOR	MODEL NAME	
PART NO.	DR4A-2.2uH-T.B	DESCRIPTION	DR 8 x 11mm

11. REMARK-1 / SAMSIN [UL CARD]

UL iQ™ for Plastics

Need more information? [Click Here](#) to go to the iQ™ for Plastics database

Component - Plastics E232031

**SAMSIN CHEMICAL CO LTD**

182 ANNYUNG-RI, TAEAN-EUP, HWASUNG-SHI KYONGGI-DO 445-970 KR

**930A/930B**

Epoxy Casting Compound (EP - Casting), furnished as two liquid components

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
ALL	3.2	V-0	-	-	90	90	90

Comparative Tracking Index (CTI): - Dimensional Stability (%): -  
 High-Voltage Arc Tracking Rate (HVTR): - High Volt, Low Current Arc Resis (D495): -  
 Dielectric Strength (kV/mm): - Volume Resistivity (10<sup>12</sup> ohm-cm): -

ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report Date: 2002-12-04   
 Last Revised: 2006-04-04 Underwriters Laboratories Inc®

**IEC and ISO Test Methods**

Test Name	Test Method	Units	Thickness Tested (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	3.2	V-0 (ALL)
Glow-Wire Flammability (GWF1)	IEC 60695-2-12	C	-	-
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	C	-	-
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC Ball Pressure	IEC 60695-10-2	C	-	-
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m <sup>2</sup>	-	-
ISO Izod Impact	ISO 180	kJ/m <sup>2</sup>	-	-
ISO Charpy Impact	ISO 179-2	kJ/m <sup>2</sup>	-	-

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The materials covered in this database are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. THE FINAL ACCEPTANCE OF THE COMPONENT IS DEPENDENT UPON ITS INSTALLATION AND USE IN COMPLETE PRODUCTS SUBMITTED TO UNDERWRITERS LABORATORIES INC.

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CUSTOMER :

<h1>SPECIFICATION</h1>		SHEET NO.	8 OF 10
		DATA	2015.11.10.
PART NAME	RADIAL INDUCTOR	MODEL NAME	
PART NO.	DR4A-2.2uH-T.B	DESCRIPTION	DR 8 x 11mm

12. REMARK-2 / CHUNYI [UL CARD]

OBMW2.E198440 - Magnet Wire - Component

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ONLINE CERTIFICATIONS DIRECTORY

**OBMW2.E198440  
Magnet Wire - Component**

[Page Bottom](#)

**Magnet Wire - Component**

[See General Information for Magnet Wire - Component](#)

**GUANGZHOU CHUNYI ELECTRIC ENTERPRISE LTD**  
 RM 348 FULI YINGFENG MANSION  
 NO 2 HUAQIANG RD ZHUJIANG XINCHENG  
 TIANHE DISTRICT  
 GUANGZHOU, GUANGDONG 528222 CHINA

E198440

Mtl Dsg	Coating Type		ANSI Type	TI
	BC	TC		
JEC-XPEW(QZ)	Polyester	—	—	155#
JEC-XUEW(QA)	Polyurethane	—	—	130#
JEC-X(EIW-AL/200) Q(ZY/XY)/200	Polyester-imide	Polyamide-imide	MW35C, MW73C	200
JEC-XUEW/155(QA/155)	Polyurethane	—	MW79C	155
*UEW or QA-*	Polyurethane	—	MW82-C	180
	Polyurethane	—	MW79-C@	155
*UEW(AL) or QA(L)-*	Polyurethane	—	MW75-C@	130
	Polyurethane	—	—	180
*UEW/NY or QA/NY-*	Polyurethane	—	@	155
	Polyurethane	—	@	130
	Polyurethane	Polyamide	MW83-C	180
	Polyurethane	Polyamide	MW80-C@	155
*UEW/NY(AL) or QA/NY(L)-*	Polyurethane	Polyamide	MW28-C@	130
	Polyurethane	Polyamide	MW28-C@	130
	Polyurethane	Polyamide	—	180
	Polyurethane	Polyamide	MW80-A@	155
*EIW or QZY-*	Polyester-imide	—	MW30-C@	180
	Polyester-imide	—	—	155
*PEW or QZ-*	Polyester-imide	—	MW5-C	155
QZ-*	Polyester-imide	—	@	130
*EIW(AL) or QZ(L)-*	Polyester-imide	—	MW74-A	200
	Polyester-imide	—	@	180
*PEW (AL) or QZ(L)-*	Polyester-imide	—	@	155
QZ(L)-*	Polyester-imide	—	@	130
*PEW/NY or QZ/NY-*	Polyester	Polyamide	MW76-C	180
	Polyester	Polyamide	MW24-C@	155
	Polyester	Polyamide	@	130
*PEW/NY(AL) or QZ/NY(L)-*	Polyester	Polyamide	MW76-A	180
	Polyester	Polyamide	MW24-A@	155

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<b>SPECIFICATION</b>		SHEET NO.	9 OF 10
		DATA	2015.11.10.
PART NAME	RADIAL INDUCTOR	MODEL NAME	
PART NO.	DR4A-2.2uH-T.B	DESCRIPTION	DR 8 x 11mm

10. REMARK-3 / RONSEN [UL CARD]

Magnet Wire - Component					
See General Information for Magnet Wire - Component					
<b>GUANGDONG RONSEN SUPER</b> MICRO-WIRE CO LTD SANZAO TECHNOLOGICAL INDUSTRY PARK AIRPORT WEST RD ZHUHAI, GUANGDONG 519000 CHINA				E164502	
Mtl Dsg	Mark Dsg	Coat Typ		ANSI Type	Temp Class
		BC	OC		
EIW	PEW	Modified Polyester	—	MW74-C	200
				MW30-C	180#
UEW/130	PUB	Polyurethane	—	MW75-C	130#
UEW/155	PUF	Polyurethane	—	MW79-C	155
UEW-Y	PUY	Polyurethane	Polyamide	MW80-C	155
				MW28-C	130#
S-EIW	PSE	Polyester-imide	—	MW77-C	180
UEW/180	PUH	Polyurethane	—	MW82-C	180
X UEW/180 (QA/180)		Polyurethane	—	MW82C	180
X UEW/155 (QA/155)		Polyurethane	—	MW79C#	155
X UEW/130 (QA/130)		Polyurethane	—	MW75C#	130
X UEW/200 (QA/200)		Polyurethane	—	@	200
X UEW/180-U (QA/180-U)		Polyurethane	—	MW82C#	180

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CUSTOMER :

<b>SPECIFICATION</b>		SHEET NO.	10 OF 10
		DATA	2015.11.10.
PART NAME	RADIAL INDUCTOR	MODEL NAME	
PART NO.	DR4A-2.2uH-T.B	DESCRIPTION	DR 8 x 11mm

11. INSPECTION DATA

NO	INDUCTANCE	DC RESISTANCE	내전압	절연저항
SPEC	2.2uH MIN	0.05Ω MAX	AC 1KV 1분 MIN	DC 500V 100MΩMIN
1	3.02	0.01	OK	OK
2	3.06	0.01	OK	OK
3	3.01	0.01	OK	OK
4	2.98	0.02	OK	OK
5	3.02	0.01	OK	OK
6	3.02	0.02	OK	OK
7	3.04	0.02	OK	OK
8	3.03	0.01	OK	OK
9	3.01	0.02	OK	OK
10	3.05	0.02	OK	OK
$\bar{X}$	3.024	0.015		
MIN	2.98	0.01		
MAX	3.06	0.02		

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