SCOPE :

This specification applies to the current type Radial Leaded Inductor

for MCD-0912S-SERIES(U)

PRODUCT INDENTIFICATION

MCD - 0912S - 102 K U

① ② ③ ④ ⑤

① Product Code

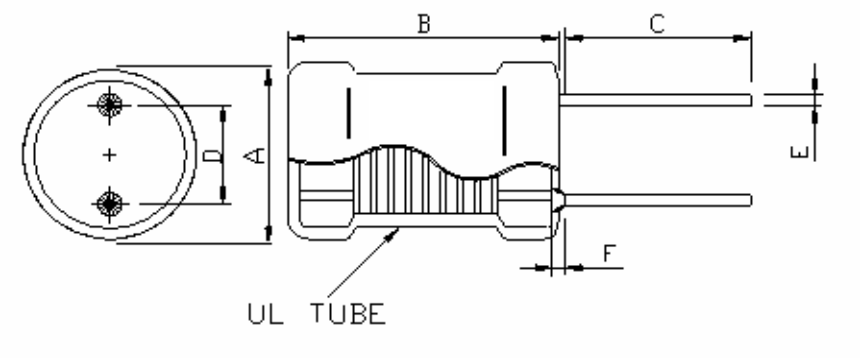
② Dimensions Code

③ Inductance Code

④ Tolerance Code

⑤ UL Tube

(1) SHAPES AND DIMENSIONS



A:	**11.5 Max.**	**mm**
B:	**14.5 Max.**	**mm**
C:	**15.0±2.0**	**mm**
D:	**5.0±0.5**	**mm**
E:	**φ0.8±0.1**	**mm**
F:	**2.5 Max.**	**mm**

(2) ELECTRICAL SPECIFICATIONS

SEE TABLE 1

TEST INSTRUMENTS

L : HP 4284A PRECISION LCR METER (or equivalent)

RDC : CHROMA MODEL 16502 MILLIOHMMETER (or equivalent)

(3) CHARACTERISTICS

(3)-1 Operate temperature range ..... －40℃～＋125℃

(Including self temp. rise)

(3)-2 Storage temperature range ..... －40℃～＋105℃

TABLE 1

MAGLAYERS PT/NO.	Inductance L(μH)	Percent Tolerance	Test Frequency	Resistance RDC(Ω)Max.	Rated DC Current	
					Isat(A)	Irms(A)
MCD-0912S-100□U	10	K,M	100kHz/0.25V	28m	6.50	4.80
MCD-0912S-220□U	22	K,M	100kHz/0.25V	50m	4.50	3.50
MCD-0912S-330□U	33	K,M	100kHz/0.25V	71m	3.80	3.10
MCD-0912S-470□U	47	K,M	100kHz/0.25V	78m	2.80	2.50
MCD-0912S-101□U	100	K,M	100kHz/0.25V	0.16	1.70	1.80
MCD-0912S-121□U	120	K,M	100kHz/0.25V	0.20	1.50	1.70
MCD-0912S-181□U	180	K,M	100kHz/0.25V	0.31	1.30	1.40
MCD-0912S-221□U	220	K,M	100kHz/0.25V	0.34	1.10	1.15
MCD-0912S-271□U	270	K,M	100kHz/0.25V	0.40	1.00	1.12
MCD-0912S-301□U	300	K,M	100kHz/0.25V	0.46	0.96	1.10
MCD-0912S-331□U	330	K,M	100kHz/0.25V	0.52	0.93	1.00
MCD-0912S-391□U	390	K,M	100kHz/0.25V	0.65	0.86	0.90
MCD-0912S-471□U	470	K,M	100kHz/0.25V	0.71	0.78	0.80
MCD-0912S-501□U	500	K,M	100kHz/0.25V	0.80	0.75	0.78
MCD-0912S-561□U	560	K,M	100kHz/0.25V	1.00	0.70	0.75
MCD-0912S-681□U	680	K,M	100kHz/0.25V	1.10	0.65	0.70
MCD-0912S-721□U	720	K,M	100kHz/0.25V	1.20	0.63	0.67
MCD-0912S-821□U	820	K,M	100kHz/0.25V	1.30	0.59	0.65
MCD-0912S-102□U	1000	K,M	100kHz/0.25V	1.70	0.53	0.60
MCD-0912S-122□U	1200	K,M	10kHz/0.25V	2.10	0.51	0.54
MCD-0912S-152□U	1500	K,M	10kHz/0.25V	2.64	0.49	0.46
MCD-0912S-182□U	1800	K,M	10kHz/0.25V	3.00	0.47	0.43
MCD-0912S-202□U	2000	K,M	10kHz/0.25V	3.30	0.45	0.41
MCD-0912S-222□U	2200	K,M	10kHz/0.25V	3.40	0.44	0.40
MCD-0912S-302□U	3000	K,M	10kHz/0.25V	4.70	0.40	0.35
MCD-0912S-322□U	3200	K,M	10kHz/0.25V	4.90	0.40	0.33
MCD-0912S-352□U	3500	K,M	10kHz/0.25V	5.30	0.37	0.32
MCD-0912S-382□U	3800	K,M	10kHz/0.25V	5.60	0.35	0.31
MCD-0912S-402□U	4000	K,M	10kHz/0.25V	5.70	0.35	0.30
MCD-0912S-472□U	4700	K,M	10kHz/0.25V	6.20	0.32	0.27
MCD-0912S-502□U	5000	K,M	10kHz/0.25V	6.60	0.30	0.26
MCD-0912S-562□U	5600	K,M	10kHz/0.25V	7.30	0.25	0.24
MCD-0912S-602□U	6000	K,M	10kHz/0.25V	7.50	0.22	0.22
MCD-0912S-682□U	6800	K,M	10kHz/0.25V	7.70	0.17	0.20
MCD-0912S-842□U	8400	K,M	10kHz/0.25V	13.60	0.14	0.17

※ 1. □ Specify the inductance tolerance, K(±10%), M(±20%)

※ 2. Isat： Based on inductance change (△L/Lo：drop 10% Max.) @ ambient temp. 25℃

Irms： Based on temperature rise (△T： 40℃ TYP.)

Rated DC Current： The less value which is Isat or Irms.

(4) RELIABILITY TEST METHOD

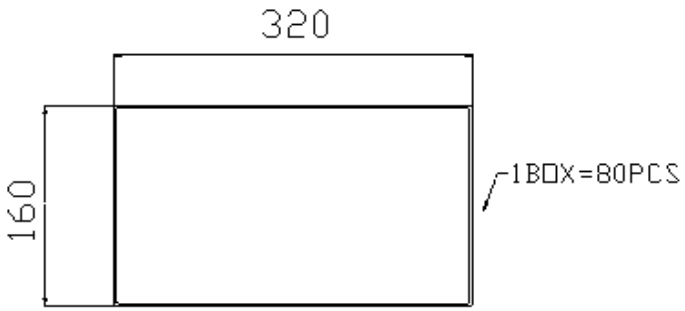
MECHANICAL

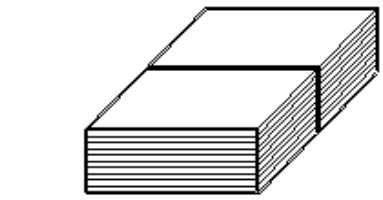
NO.	ITEMS	SPECIFICATIONS	CONDITIONS
1	Solderability test	More than 90% of the termnial electrode should be covered with solder.	Dipping: 245 ± 5 ℃, 3 ± 1 seconds
2	lead tensile strength test	1.0 Kg MIN.	The lead of product is pulled with a load of 1.0kg mininum until lead breakdown. The tensile force shall be recorded.
3	Vibration test	△L/L≦±7% Visual:OK	The product is fixed ento the vibration with amplitude of 1.52m/m at a frequency of 10～55Hz sweeping for lmin. The vibration is done at X,Y, Z direction respectively for 2 houes, totally 6 hours.
4	Soldering heat resistance test	Visual:OK Circuit:OK	The leads of product are dipped into a solder pot of 260±5℃ for a duration of 10±1sec. Nothing particular on visual and open circuitry as a result of ore testing.

ENVIRONMENTAL

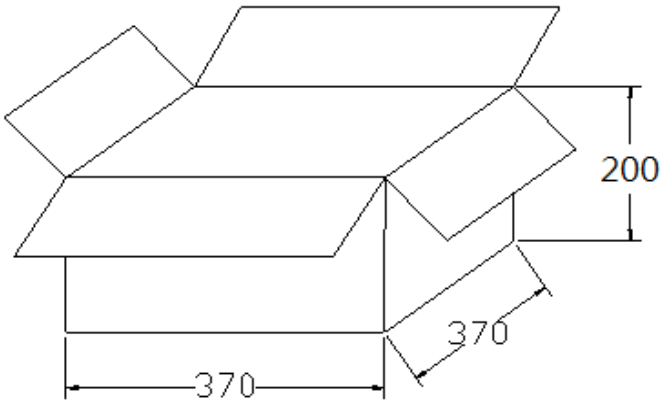
NO.	ITEMS	SPECIFICATIONS	CONDITIONS
1	Humidity endurance test	△L/L≦±5%	The product is placed in a chamber of 40±2℃, 90～95%RH for 96 hours. Measurement is done after the reaovery of 4～24 hours.
2	High temp endurance test	△L/L≦±5%	The product is placed in a chamber of 125±2℃, for 72 hours. Measurement is done after recovery of 4～24 hours.
3	Low temp test	△L/L≦±5%	The product is placed in a chamber of -40±2℃, for 96 hours. Measurement is done after recovery of 4～24 hours.
4	Thermal shock test	△L/L≦±5%	The specimens are placed in a chamber and the temp is then lowered to -40±2℃ for one hour. The temp will raised to +125±2℃ for one hour. This constitues one cycle. Ten cycles of such testing shall be completed. Measurement is made after recovery for 4～24 hours from the completion of testing.

(5) PACKAGE SPECIFICATION (mm)

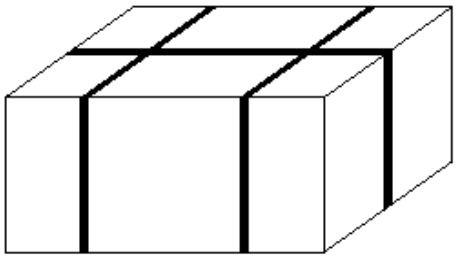




INNER BOX *20(1,600 PCS)



OUT BOX (1,600 PCS)



Please note that the contents may change without any prior notice due to reasons such as upgrading.