Ⅰ. SCOPE：

This specification applies to the current type Radial Leaded Inductor

for MCD-0406S-SERIES(U)

PRODUCT INDENTIFICATION

MCD - 0406S - 101 M U

① ② ③④⑤

① Product Code

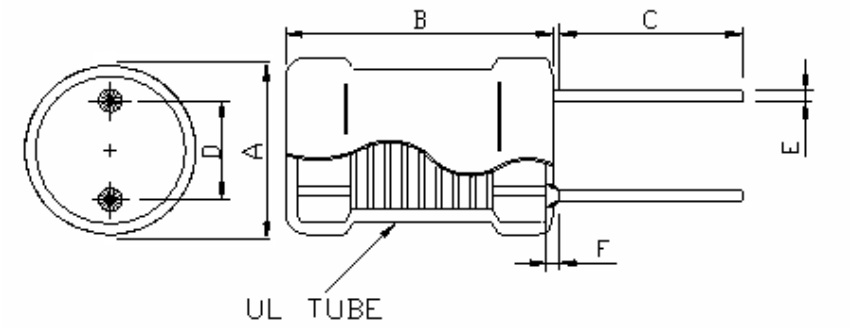
② Dimensions Code

③ Inductance Code

④ Tolerance Code

⑤ UL Tube

(1) SHAPES AND DIMENSIONS



A:	**5.5Max.**	**mm**
B:	**8.0Max.**	**mm**
C:	**15.0±2.0**	**mm**
D:	**2.0±0.5**	**mm**
E:	**φ0.5±0.1**	**mm**
F:	**2.0Max.**	**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-0406S-1R0□U	1.0	M,N	100kHz/0.25V	12.6m	5.20	4.70
MCD-0406S-1R5□U	1.5	M,N	100kHz/0.25V	16.4m	4.30	4.50
MCD-0406S-2R2□U	2.2	M,N	100kHz/0.25V	22.8m	3.50	3.80
MCD-0406S-3R3□U	3.3	M,N	100kHz/0.25V	30.1m	2.60	3.00
MCD-0406S-4R7□U	4.7	M	100kHz/0.25V	47.1m	2.20	2.00
MCD-0406S-470□U	47	K,M	100kHz/0.25V	0.320	0.67	0.75
MCD-0406S-101□U	100	K,M	100kHz/0.25V	1.105	0.46	0.55
MCD-0406S-221□U	220	K,M	100kHz/0.25V	1.416	0.27	0.35
MCD-0406S-271□U	270	K,M	100kHz/0.25V	1.800	0.25	0.30
MCD-0406S-471□U	470	K,M	100kHz/0.25V	3.4	0.20	0.25
MCD-0406S-661□U	660	K,M	100kHz/0.25V	4.3	0.19	0.22
MCD-0406S-102□U	1000	K,M	100kHz/0.25V	7.0	0.15	0.17
MCD-0406S-182□U	1800	K,M	10kHz/0.25V	11.0	0.12	0.14
MCD-0406S-222□U	2200	K,M	10kHz/0.25V	12.5	0.11	0.13
MCD-0406S-272□U	2700	K,M	10kHz/0.25V	14.3	0.10	0.12
MCD-0406S-302□U	3000	K,M	10kHz/0.25V	15.3	0.09	0.11
MCD-0406S-332□U	3300	K,M	10kHz/0.25V	19.5	0.09	0.10
MCD-0406S-392□U	3900	K,M	10kHz/0.25V	21.1	0.08	0.10
MCD-0406S-562□U	5600	K,M	10kHz/0.25V	32.0	0.07	0.09

※ □ specify the inductance tolerance , K(±10%) , M(±20%) , N(±30%)

※ 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

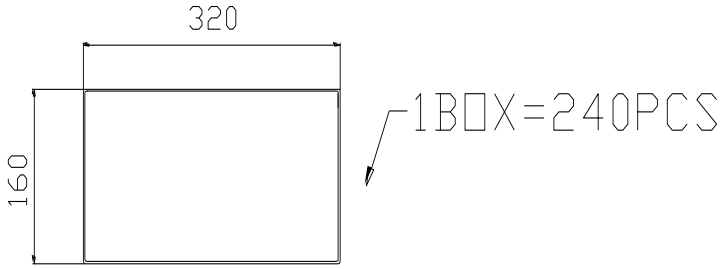
MECHANICAL

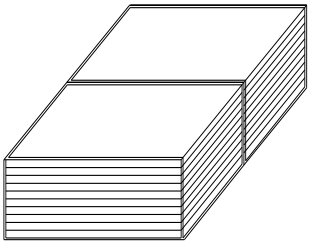
NO.	ITEMS	SPECIFICATIONS	CONDITIONS
1	Solderability test	More than 90% of the termnial electrode should be covered with solder.	Dipping: 245 ± 5 ℃, 3 ± 1 seconds
2	lead tensile strength test	1.0 Kg MIN.	The lead of product is pulled with a load of 1.0kg mininum until lead breakdown. The tensile force 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

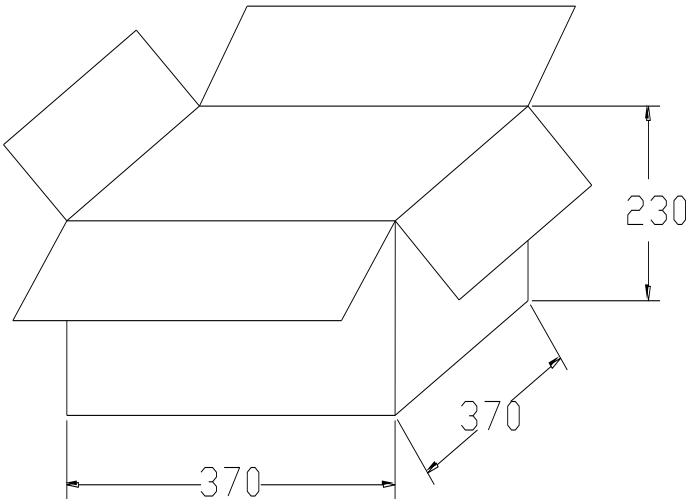
NO.	ITEMS	SPECIFICATIONS	CONDITIONS
1	Humidity endurance test	△L/L≦±5%	The product is placed in a chamber of 40±2℃, 90～95%RH for 96 hours. Measurement is done after the reaovery of 4～24 hours.
2	High temp endurance test	△L/L≦±5%	The product is placed in a chamber of 125±2℃, for 72 hours. Measurement 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)

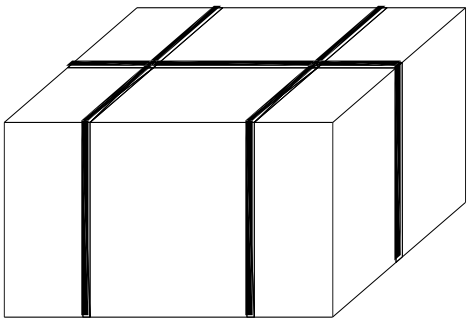




INNER BOX *50(12,000 PCS)



OUT BOX (12,000 PCS)



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