

SCOPE :

This specification applies to the current type Radial Leaded Inductor
for MCD-0608S-SERIES(U)

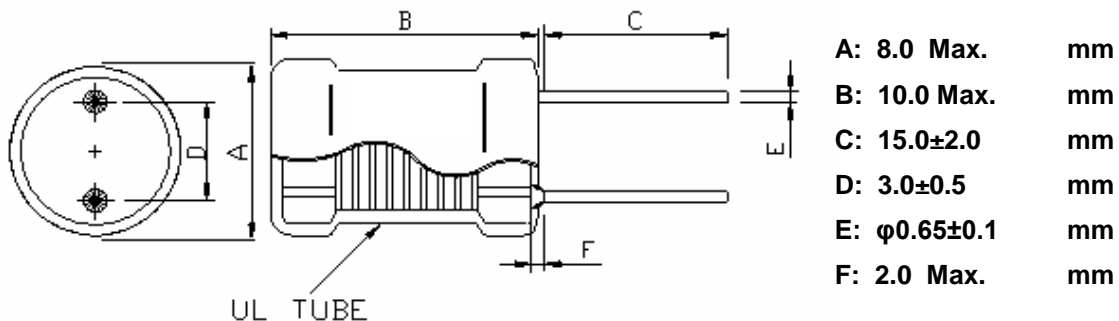
PRODUCT IDENTIFICATION

MCD - 0608S - 331 K U

① ② ③ ④⑤

- ① Product Code
- ② Dimensions Code
- ③ Inductance Code
- ④ Tolerance Code
- ⑤ UL Tube

(1) SHAPES AND DIMENSIONS



(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 $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

(Including self temp. rise)

(3)-2 Storage temperature range $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$



MAG.LAYERS

TABLE 1

MAGLAYERS PT/NO.	Inductance L(μ H)	Percent Tolerance	Test Frequency	Resistance RDC(Ω)Max.	Rated DC Current	
					Isat(A)	Irms(A)
MCD-0608S-1R0□U	1.0	M	100kHz/0.25V	11.5m	8.00	7.50
MCD-0608S-1R2□U	1.2	M	100kHz/0.25V	13m	7.50	7.00
MCD-0608S-2R2□U	2.2	K,M	100kHz/0.25V	16m	7.00	6.00
MCD-0608S-3R3□U	3.3	M	100kHz/0.25V	19m	5.50	5.00
MCD-0608S-4R7□U	4.7	M	100kHz/0.25V	23m	4.00	4.20
MCD-0608S-100□U	10	K,M	100kHz/0.25V	0.13	2.40	3.00
MCD-0608S-150□U	15	K,M	100kHz/0.25V	0.19	1.30	2.70
MCD-0608S-220□U	22	K,M	100kHz/0.25V	0.30	1.15	2.00
MCD-0608S-270□U	27	K,M	100kHz/0.25V	0.40	1.10	1.80
MCD-0608S-330□U	33	K,M	100kHz/0.25V	0.55	1.05	1.75
MCD-0608S-390□U	39	K,M	100kHz/0.25V	0.59	1.00	1.50
MCD-0608S-470□U	47	K,M	100kHz/0.25V	0.61	0.95	1.20
MCD-0608S-500□U	50	K,M	100kHz/0.25V	0.62	0.93	1.10
MCD-0608S-680□U	68	K,M	100kHz/0.25V	0.65	0.83	1.00
MCD-0608S-101□U	100	K,M	100kHz/0.25V	0.74	0.70	0.95
MCD-0608S-221□U	220	K,M	100kHz/0.25V	0.89	0.49	0.68
MCD-0608S-331□U	330	K,M	100kHz/0.25V	1.08	0.41	0.65
MCD-0608S-351□U	350	K,M	100kHz/0.25V	1.24	0.39	0.60
MCD-0608S-391□U	390	K,M	100kHz/0.25V	1.32	0.37	0.50
MCD-0608S-471□U	470	K,M	100kHz/0.25V	1.45	0.32	0.40
MCD-0608S-501□U	500	K,M	100kHz/0.25V	1.68	0.31	0.40
MCD-0608S-561□U	560	K,M	100kHz/0.25V	2.00	0.29	0.40
MCD-0608S-681□U	680	K,M	100kHz/0.25V	2.50	0.26	0.38
MCD-0608S-821□U	820	K,M	100kHz/0.25V	3.00	0.22	0.35
MCD-0608S-102□U	1000	K,M	100kHz/0.25V	2.30	0.20	0.33
MCD-0608S-152□U	1500	J,K	10kHz/0.25V	4.50	0.18	0.27
MCD-0608S-202□U	2000	K,M	10kHz/0.25V	5.00	0.14	0.22
MCD-0608S-222□U	2200	K,M	10kHz/0.25V	6.30	0.13	0.22
MCD-0608S-242□U	2400	K,M	10kHz/0.25V	7.26	0.13	0.22
MCD-0608S-282□U	2800	K,M	10kHz/0.25V	7.50	0.12	0.20
MCD-0608S-302□U	3000	K,M	10kHz/0.25V	10.20	0.10	0.18
MCD-0608S-332□U	3300	K,M	10kHz/0.25V	10.80	0.09	0.16
MCD-0608S-472□U	4700	K,M	10kHz/0.25V	18.50	0.07	0.13

※ □ specify the inductance tolerance, J(\pm 5%), K(\pm 10%), M(\pm 20%)

Isat : Based on inductance change (Δ L/Lo : drop 10% Max) @ambient temperature 25°C

Irms : Based on temperature rise (Δ T : 40°C TYP.)

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



(4) RELIABILITY TEST METHOD MECHANICAL

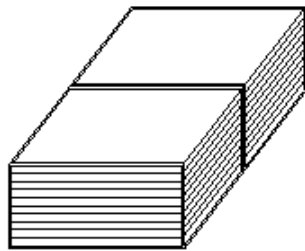
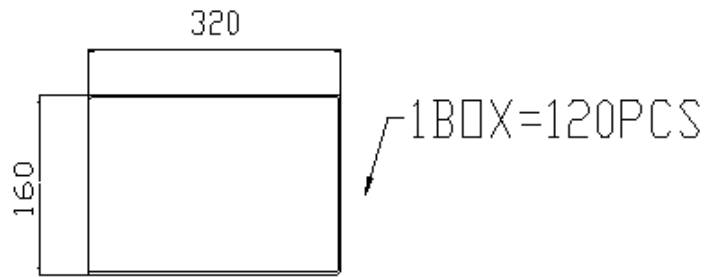
NO.	ITEMS	SPECIFICATIONS	CONDITIONS
1	Solderability test	More than 90% of the terminal electrode should be covered with solder.	Dipping: 245 ± 5 °C, 3 ± 1 seconds
2	lead tensile strength test	1.0 Kg MIN.	The lead of product is pulled with a load of 1.0kg minimum until lead breakdown. The tensile force shall be recorded.
3	Vibration test	$\Delta L/L \leq \pm 7\%$ Visual:OK	The product is fixed into the vibration with amplitude of 1.52m/m at a frequency of 10~55Hz sweeping for 1min. 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°C for a duration of 10±1sec. Nothing particular on visual and open circuitry as a result of ore testing.

ENVIRONMENTAL

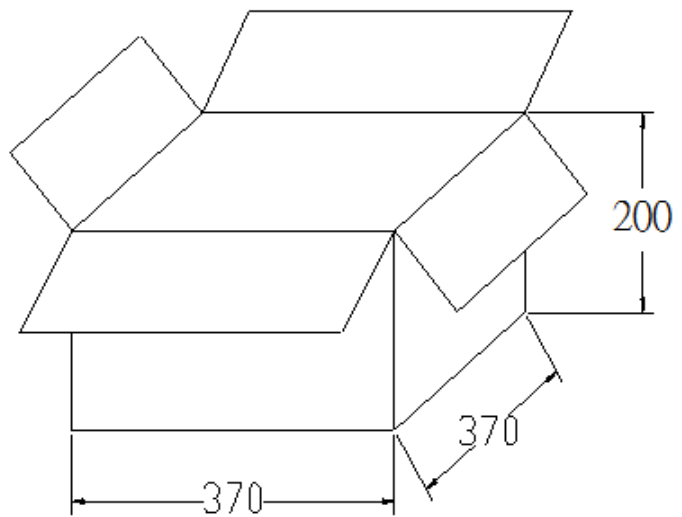
NO.	ITEMS	SPECIFICATIONS	CONDITIONS
1	Humidity endurance test	$\Delta L/L \leq \pm 5\%$	The product is placed in a chamber of 40±2°C, 90~95%RH for 96 hours. Measurement is done after the reaovery of 4~24 hours.
2	High temp endurance test	$\Delta L/L \leq \pm 5\%$	The product is placed in a chamber of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



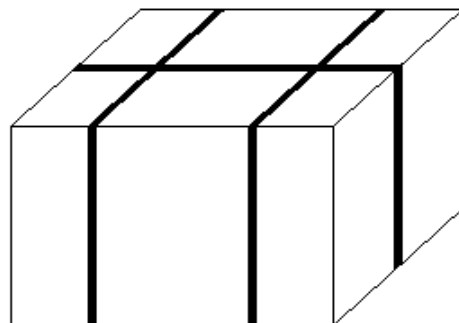
(5) PACKAGE SPECIFICATION (mm)



INNER BOX *26 (3,120 PCS)



OUT BOX (3,120 PCS)



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

