

## SCOPE :

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

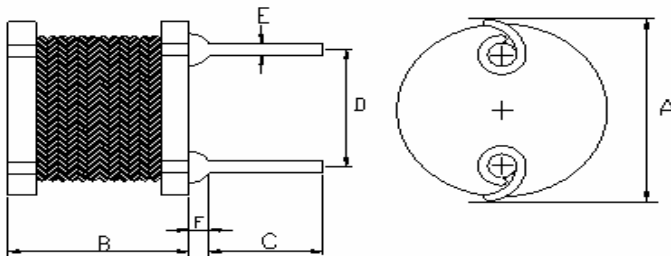
### PRODUCT IDENTIFICATION

**MCD - 0608S - 330 M**

① ② ③ ④

- ① Product Code
- ② Dimensions Code
- ③ Inductance Code
- ④ Tolerance Code

## (1) SHAPES AND DIMENSIONS



A: 7.8 Max.	mm
B: 8.5 Max.	mm
C: 15.0±2.0	mm
D: 3.0±0.5	mm
E: $\varnothing 0.65 \pm 0.1$	mm
F: 2.0 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 .....  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

(Including self temp. rise)

(3)-2 Storage temperature range .....  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$



**MAG.LAYERS**

**TABLE 1**

MAGLAYERS PT/NO.	Inductance L(μH)	Percent Tolerance	Test Frequency	Resistance RDC(Ω)Max.	Rated DC Current	
					Isat(A)	Irms(A)
MCD-0608S-1R0□	1.0	M	100kHz/0.25V	11.5m	8.00	7.50
MCD-0608S-1R2□	1.2	M	100kHz/0.25V	13m	7.50	7.00
MCD-0608S-2R2□	2.2	M	100kHz/0.25V	16m	7.00	6.00
MCD-0608S-3R3□	3.3	M	100kHz/0.25V	19m	5.50	5.00
MCD-0608S-4R7□	4.7	M	100kHz/0.25V	23m	4.00	4.20
MCD-0608S-100□	10	K,M	100kHz/0.25V	0.13	2.40	3.00
MCD-0608S-150□	15	K,M	100kHz/0.25V	0.19	1.30	2.70
MCD-0608S-220□	22	K,M	100kHz/0.25V	0.30	1.15	2.00
MCD-0608S-270□	27	K,M	100kHz/0.25V	0.40	1.10	1.80
MCD-0608S-330□	33	K,M	100kHz/0.25V	0.55	1.05	1.75
MCD-0608S-390□	39	K,M	100kHz/0.25V	0.59	1.00	1.50
MCD-0608S-470□	47	K,M	100kHz/0.25V	0.61	0.95	1.20
MCD-0608S-500□	50	K,M	100kHz/0.25V	0.62	0.93	1.10
MCD-0608S-680□	68	K,M	100kHz/0.25V	0.65	0.83	1.00
MCD-0608S-101□	100	K,M	100kHz/0.25V	0.74	0.70	0.95
MCD-0608S-151□	150	K,M	100kHz/0.25V	0.80	0.62	0.85
MCD-0608S-181□	180	K,M	100kHz/0.25V	0.84	0.60	0.70
MCD-0608S-221□	220	K,M	100kHz/0.25V	0.89	0.49	0.60
MCD-0608S-331□	330	K,M	100kHz/0.25V	1.08	0.41	0.65
MCD-0608S-351□	350	K,M	100kHz/0.25V	1.24	0.39	0.60
MCD-0608S-391□	390	K,M	100kHz/0.25V	1.32	0.37	0.50
MCD-0608S-471□	470	K,M	100kHz/0.25V	1.45	0.32	0.40
MCD-0608S-561□	560	K,M	100kHz/0.25V	2.00	0.29	0.40
MCD-0608S-681□	680	K,M	100kHz/0.25V	2.50	0.26	0.38
MCD-0608S-821□	820	K,M	100kHz/0.25V	3.00	0.22	0.35
MCD-0608S-102□	1000	K,M	100kHz/0.25V	2.30	0.20	0.33
MCD-0608S-152□	1500	J,K	10kHz/0.25V	4.50	0.18	0.27
MCD-0608S-202□	2000	K,M	10kHz/0.25V	5.00	0.14	0.22
MCD-0608S-222□	2200	K,M	10kHz/0.25V	6.30	0.13	0.22
MCD-0608S-242□	2400	K,M	10kHz/0.25V	7.26	0.13	0.22
MCD-0608S-302□	3000	K,M	10kHz/0.25V	10.20	0.10	0.18
MCD-0608S-332□	3300	K,M	10kHz/0.25V	10.80	0.09	0.16

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

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

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

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

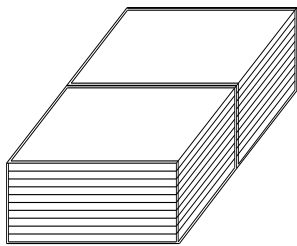
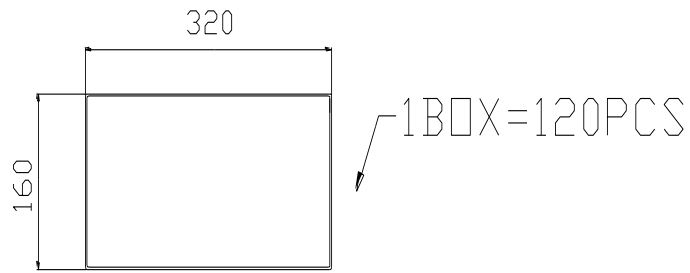
#### (4) RELIABILITY TEST METHOD MECHANICAL

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.

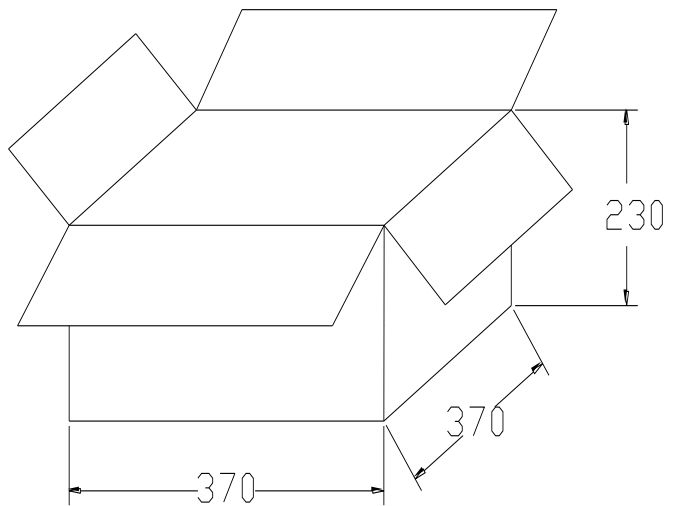
#### ENVIRONMENTAL

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.

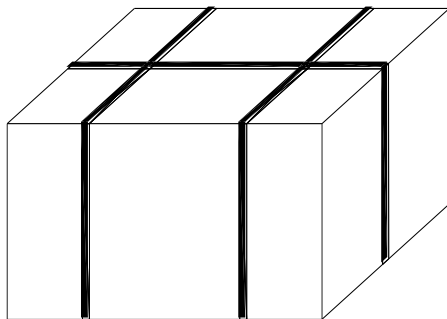
**(5) PACKAGE SPECIFICATION (mm)**



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.

