SCOPE :

This specification applies to the current type Radial Leaded Inductor

for MCD-855C-SERIES

PRODUCT INDENTIFICATION

MCD - 855C - 220 K

① ② ③ ④

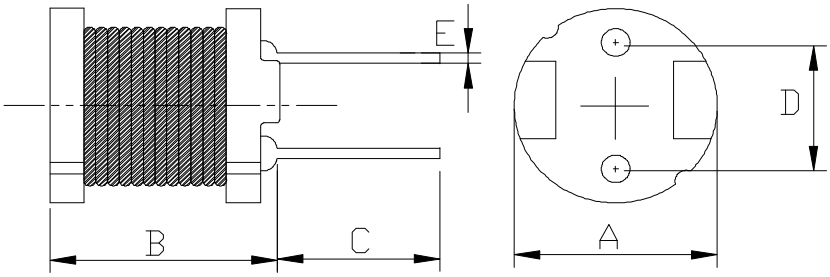
① Product Code

② Dimensions Code

③ Inductance Code

④ Tolerance Code

(1) SHAPES AND DIMENSIONS



A : 7.8±0.5	**mm**
B : 6.5 Max.	**mm**
C : 15±2.0	**mm**
D : 5.0±0.5	**mm**
E : φ0.65±0.1	**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 Ambient temperature ……..... ＋60℃ Max.

(3)-2 Operate temperature range ..... －40℃～＋125℃

(Including self temp. rise)

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

TABLE 1

MAGLAYERS PT/NO.	Inductance L(μH)	Percent Tolerance	Test Frequency	Resistance RDC(Ω)Max.	Rated DC Current	
					IDC1(A)	IDC2(A)
MCD-855C-150□	15	K,M	100kHz/0.25V	90m	2.1	2.1
MCD-855C-220□	22	K,M	100kHz/0.25V	0.12	1.7	1.9
MCD-855C-330□	33	K,M	100kHz/0.25V	0.17	1.4	1.8
MCD-855C-121□	120	K,M	100kHz/0.25V	0.59	0.76	0.80
MCD-855C-331□	330	K,M	100kHz/0.25V	1.47	0.44	0.52
MCD-855C-471□	470	K,M	100kHz/0.25V	1.95	0.38	0.43
MCD-855C-821□	820	K,M	100kHz/0.25V	3.82	0.31	0.32
MCD-855C-102□	1000	K,M	100kHz/0.25V	5.28	0.25	0.30
MCD-855C-122□	1200	J,K	1kHz/0.25V	6.03	0.23	0.26
MCD-855C-152□	1500	J,K	1kHz/0.25V	7.15	0.21	0.25
MCD-855C-182□	1800	J,K	1kHz/0.25V	8.26	0.20	0.23
MCD-855C-222□	2200	J,K	1kHz/0.25V	11.1	0.18	0.18
MCD-855C-682□	6800	J,K	1kHz/0.25V	31.7	0.098	0.11

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

※ IDC1： Based on inductance change (△L/Lo：drop 10% Max.) @ ambient temp. 25℃

IDC2： Based on temperature rise (△T： 40℃ TYP.)

Rated DC Current： The less value which is IDC1 or IDC2.

(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 80±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 -20±2℃ for one hour. The temp will raised to +80±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)