

SCOPE :

This specification applies to the current type Radial Leaded Inductor
for MCD-855C-SERIES

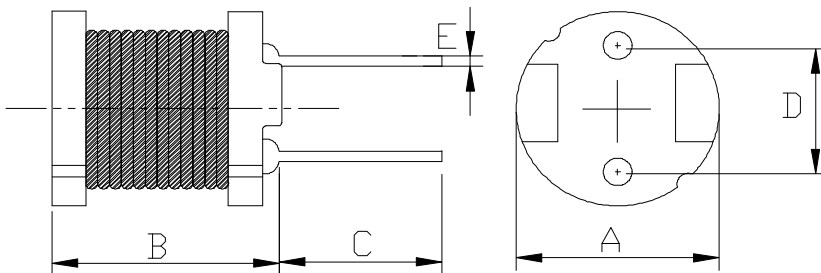
PRODUCT IDENTIFICATION

MCD - 855C - 220 K-RU

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°C Max.
- (3)-2 Operate temperature range -40°C ~ +125°C
(Including self temp. rise)
- (3)-3 Storage temperature range -40°C ~ +125°C



MAG.LAYERS

TABLE 1

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

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

※ IDC1 : Based on inductance change (Δ L/L_o : drop 10% Max.) @ ambient temp. 25°C

IDC2 : Based on temperature rise (Δ T : 40°C 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 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 hours, 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 recovery of 4~24 hours.
2	High temp endurance test	$\Delta L/L \leq \pm 5\%$	The product is placed in a chamber of 80±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 -20±2°C for one hour. The temp will raised to +80±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)

