



● FEATURE

1. Wire wound SMD inductors
2. Highly accurate dimensions and reliable
3. Low DC resistance, high current for the power line

● APPLICATION

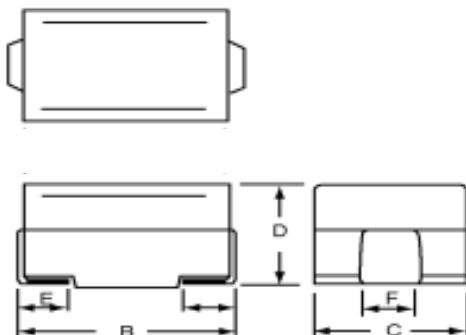
1. Digital camera, Portable equipment
2. LCD Panel
3. Hard Disk drives, and other electronic equipment



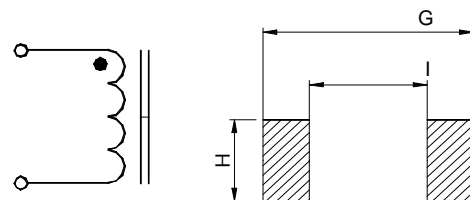
● ORDERING INFORMATION

<u>WCD322522</u>	<u>-1R0</u>	<u>T</u>
PN	Inductance	K :±10%
		M :±20%

● SHAPE AND DIMENSION



● SCHEMATICS AND LAND PATTERNS(mm)



● SPECIFICATION

Dimension in mm

TYPE	B	C	D	E	F	G	I	H
WCD322522(1210)	3.20±0.30	2.50±0.20	2.20±0.20	0.60	1.90	4.00	2.00	2.00
WCD453232V(1812)	4.50±0.30	3.20±0.20	3.20±0.20	0.90	2.70	6.00	3.00	2.80

Note1. Measurement frequency of Inductance value : at electrical characteristics

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. IDC : This indicates the value of current when the inductances is 10% lower than its initial value at D.C. superimposition or D.C. current when at Δt=20°C, which is lower. (Ta=20°C)

Note4. Inductance tolerance: J: ±5% ; K: ±10% ; M: ±20%

Note5. This specification might be changed without notice due to under developing and improving.



●ELECTRICAL CHARACTERISTICS

<b>PART NUMBER</b>	<b>L (<math>\mu</math>H)</b>	<b>TEST FREQ. (MHz)</b>	<b>Q Min</b>	<b>SRF (MHz) Min</b>	<b>RDC (<math>\Omega</math>) Max</b>	<b>IDC (mA) Max</b>
WCD322522-1R0M	1.0	7.96	10	100	0.156	770
WCD322522-1R5M	1.5	7.96	10	80	0.195	580
WCD322522-2R2M	2.2	7.96	10	65	0.260	480
WCD322522-3R3M	3.3	7.96	10	55	0.325	400
WCD322522-4R7M	4.7	7.96	10	45	0.520	320
WCD322522-6R8M	6.8	7.96	10	35	0.650	280
WCD322522-100K	10	2.52	15	28	1.105	220
WCD322522-100KA	10	2.52	15	30	1.200	450
WCD322522-150K	15	2.52	15	25	1.690	180
WCD322522-220K	22	2.52	15	20	2.600	145
WCD322522-330K	33	2.52	15	15	3.640	115
WCD322522-470K	47	2.52	20	13	5.460	105
WCD322522-680K	68	2.52	20	10	8.450	85
WCD322522-101K	100	0.796	20	8	10.14	75

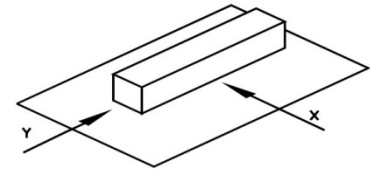


Part Number	L ( $\mu$ H)	TEST FREQ. (MHz)	Q Min	SRF (MHz) Min	RDC ( $\Omega$ ) Max	IDC (mA) Max
WCD453232V-1R0K	1.0	7.96	10	180	0.11	1050
WCD453232V-1R2K	1.2	7.96	10	160	0.12	1000
WCD453232V-1R5K	1.5	7.96	10	130	0.15	950
WCD453232V-1R8K	1.8	7.96	10	100	0.16	900
WCD453232V-2R2K	2.2	7.96	10	80	0.18	850
WCD453232V-2R7K	2.7	7.96	10	60	0.20	800
WCD453232V-3R3K	3.3	7.96	10	45	0.22	750
WCD453232V-3R9K	3.9	7.96	10	40	0.24	700
WCD453232V-4R7K	4.7	7.96	10	35	0.27	650
WCD453232V-5R6K	5.6	7.96	10	30	0.30	650
WCD453232V-6R8K	6.8	7.96	10	28	0.35	600
WCD453232V-8R2K	8.2	7.96	10	25	0.40	600
WCD453232V-100K	10	2.52	10	22	0.50	550
WCD453232V-120K	12	2.52	10	21	0.60	500
WCD453232V-150K	15	2.52	10	20	0.70	450
WCD453232V-180K	18	2.52	10	19	0.80	400
WCD453232V-220K	22	2.52	10	18	0.90	370
WCD453232V-270K	27	2.52	10	16	1.20	330
WCD453232V-330K	33	2.52	10	14	1.40	300
WCD453232V-390K	39	2.52	10	12	1.60	280
WCD453232V-470K	47	2.52	10	11.5	1.90	260
WCD453232V-560K	56	2.52	10	11	2.20	240
WCD453232V-680K	68	2.52	10	10	2.60	220
WCD453232V-820K	82	2.52	10	9	3.50	200
WCD453232V-101K	100	0.796	20	8	4.00	180
WCD453232V-121K	120	0.796	20	7.5	4.50	160
WCD453232V-151K	150	0.796	20	7.0	6.50	140
WCD453232V-181K	180	0.796	20	6.5	7.50	120
WCD453232V-221K	220	0.796	20	5.5	9.00	120
WCD453232V-271K	270	0.796	20	5.0	11.0	100
WCD453232V-331K	330	0.796	20	4.0	13.0	90
WCD453232V-391K	390	0.796	30	3.0	13.5	85
WCD453232V-471K	470	0.796	30	3.0	15.0	75
WCD453232V-561K	560	0.796	30	3.0	17.0	70
WCD453232V-681K	680	0.796	30	2.5	22.8	65



●GENERAL CHARACTERISTICS

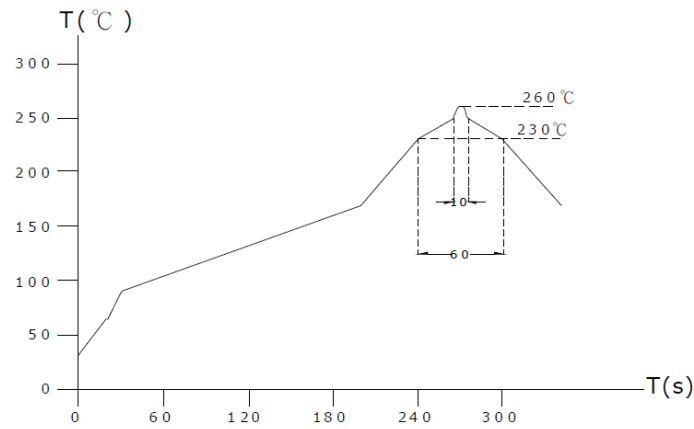
1. Operating temperature range  
-40 TO +85°C (Includes temperature when the coil is heated)
2. External appearance  
On visual inspection, the coil has external defects.
3. Terminal strength  
After soldering. Between copper plate and terminals of coil.  
Push in two directions of X.Y withstanding at below conditions.  
Terminal should not peel off. (refer to figure at right) 0.5KG MIN.
4. Insulating resistance.  
Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength  
No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics  
Inductance coefficient  $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$  (-25~+80°C).
7. Humidity characteristics  
Inductance deviation within  $\pm 5\%$ , after 96 hours in 90~95% relative humidity at  $40 \pm 2^{\circ}\text{C}$  and 1 hour drying under normal condition.
8. Vibration resistance  
Inductance deviation within  $\pm 5\%$ , after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance  
Inductance deviation within  $\pm 5\%$ , after being dropped once with  $981\text{m/s}^2$  (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C, 10 seconds
11. Storage environment  
Storage condition:  
Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C)  
Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%)  
Transportation condition: Temperature Range: -35°C ~ 85°C  
Humidity Range: 50% ~ 95% RH





●RELIABILITY TEST

Lead – free heat endurance test

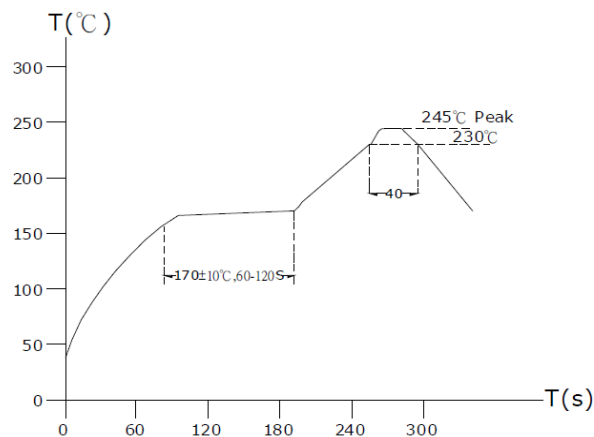


\*A test is made under the conditions mentioned above, and it is left for 2 hours in the normal temperature and humidity.

After that, no mechanical and electrical defect should be found.

\*The reflow condition is according to the in house machine.

Lead-free the recommended reflow condition



\*The reflow condition recommended above is according to the in house machine. Differences will arise as a result of the type of machine, reflow conditions, method ...etc.

Hence, before setting up your reflow conditions, please confirm with the above. Moreover, please clear all doubts with us before starting.