

DEKE TECHNOLOGY AXIAL LEADED FIXED INDUCTORS AL0510 TYPE

Shape & Dimension

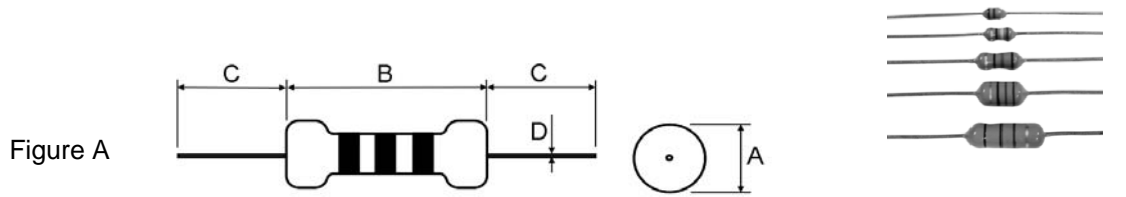


Figure A

Schematic

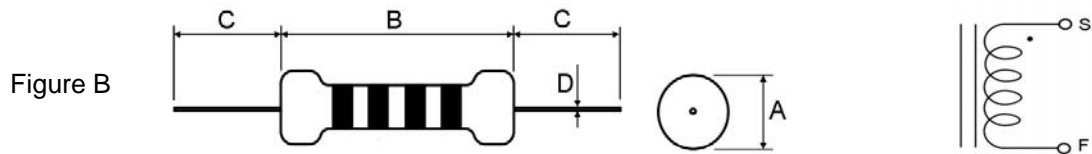


Figure B

TYPE	A(Max)	B(Max)	C(Max)	D(Max)	Figure
AL0510	5.00	12.00	31	0.7	B

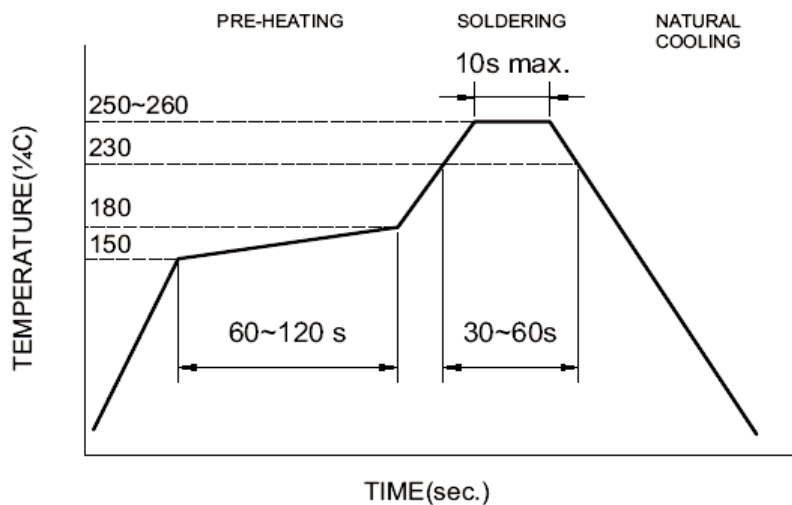
Features:

- 1.Coating epoxy resin that ensures the humidity resistance to be long life.
- 2.Contribute to be high Q and self-resonant frequencies.

Applications:

- 1.Electronics products.
- 2.Communication equipment.
- 3.Computer Devices.
- 4.TV, VCR

Recommended Reflow



DEKE AXIAL LEADED FIXED INDUCTORS

TECHNOLOGY AL0510 TYPE

Electrical Characteristics

Part No.	Inductance	L/Q Test Freq	Q	RDC	IDC	Tolerance
	(μ H)	(MHZ)	Min.	(Ω)Max.	(mA)Max.	(\pm %)
AL0510-100K	10	0.001	10	0.10	630	10
AL0510-120K	12	0.001	25	0.15	610	10
AL0510-220K	22	0.001	30	0.20	540	10
AL0510-300K	30	0.001	25	0.30	490	10
AL0510-360K	36	0.001	25	0.40	460	10
AL0510-430K	43	0.001	25	0.50	450	10
AL0510-101K	100	0.001	45	0.90	280	10
AL0510-221K	220	0.001	30	1.80	180	10
AL0510-102K	1000	0.001	70	6.00	90	10
AL0510-112K	1100	0.001	70	8.00	82	10
AL0510-122K	1200	0.001	75	9.00	75	10
AL0510-152K	1500	0.001	80	10.00	69	10
AL0510-182K	1800	0.001	80	11.00	60	10
AL0510-222K	2200	0.001	80	14.00	58	10
AL0510-272K	2700	0.001	75	18.00	52	10
AL0510-302K	3000	0.001	75	20.00	50	10
AL0510-312K	3100	0.001	75	21.00	49	10
AL0510-332K	3300	0.001	70	22.00	48	10
AL0510-392K	3900	0.001	60	26.00	45	10
AL0510-472K	4700	0.001	60	30.00	40	10
AL0510-562K	5600	0.001	50	34.00	37	10
AL0510-682K	6800	0.001	50	45.00	34	10
AL0510-822K	8200	0.001	50	60.00	31	10
AL0510-103K	10000	0.001	45	70.00	28	10
AL0510-123K	12000	0.001	45	82.00	24	10
AL0510-153K	15000	0.001	40	89.00	22	10
AL0510-163K	16000	0.001	40	100.00	18	10
AL0510-183K	18000	0.001	40	140.00	14	10
AL0510-203K	20000	0.001	40	155.00	13	10
AL0510-223K	22000	0.001	40	170.00	12	10
AL0510-253K	25000	0.001	40	185.00	11	10
AL0510-273K	27000	0.001	35	210.00	9.5	10
AL0510-303K	30000	0.001	40	240.00	8.5	10
AL0510-333K	33000	0.001	40	250.00	8	10
AL0510-393K	39000	0.001	40	300.00	7.5	10
AL0510-403K	40000	0.001	40	350.00	7	10
AL0510-473K	47000	0.001	35	380.00	6.5	10
AL0510-683K	68000	0.001	35	400.00	6	10

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AL0510 TYPE

NOTE:

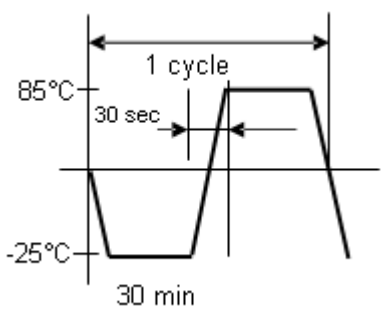
The Nominal Inductance Is Marked By a Color Code As Listed In Table Below.

Color	Nominal Inductance(μH)			
	First Figure	Second Figure	Multiplier	Tolerance
Black	0		1	±20%
Brown	1		10	-
Red	2		100	-
Orange	3		1000	-
Yellow	4		-	-
Green	5		-	-
Blue	6		-	-
Purple	7		-	-
Grey	8		-	-
White	9		-	-
Gold	-	-	0.10	±5%
Silver	-	-	0.01	±10%

Reliability and Test Conditions(可靠性測試條件)

1-1.Environmental Performance

Item	Specification	Test Method
Solderability	The metalized area must have 90% minimum solder coverage.	Dip pads in flux and dip in solder pot(96.5 Sn/3.5 Ag solder) at 255°C ±5°C.
Resistance to soldering heat	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be reflowed onto a PC board using 96.5 Sn/3.5 Ag solder paste. Solder process shall be at a maximum temperature of 260° C. For 96.5 Sn/3.5 Ag solder paste:>217°C for 90 seconds.
Vibration	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Solder specimen inductor on the test printed circuit board. Apply vibrations in each of the x,y and z directions for 2 house for a total of 6 hours. Frequency : 10-50 Hz Amplitude : 1.5mm

Item	Specification	Test Method
High temperature resistance	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be subjected to temperature $85\pm 2^{\circ}\text{C}$ for 500 ± 12 hours. Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.
Static Humidity	Inductors must not have a shorted or open winding.	Inductors shall be subjected to temperature $85\pm 2^{\circ}\text{C}$ and 90 to 95%RH. for ten 24-hours. Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.
Low temperature storage	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be subjected to temperature $-25\pm 2^{\circ}\text{C}$ for 48 ± 12 hours. Measure the test items after leaving the inductors at room temperature and humidity for 1 to 2 hours.
Resistance to solvent	There must be no case deformation, change in dimensions, or obliteration of marking.	Inductors must withstand 6 minutes of alcohol or water.
Thermal shock	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	<p>Inductors shall be subjected to 10 cycles to the following temperature cycle:</p>  <p>Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.</p>