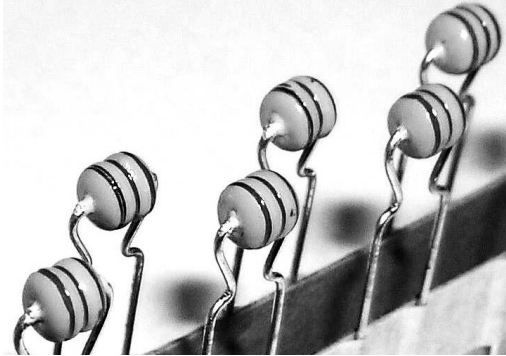


RADIAL LEADED INDUCTORS

■ **OPERATION TEMP.** -25~+85°C (Including self-generated heat)



■ **FEATURES**

- The RD Series inductors are available in 3 form factors range from 35 to 45.
- For small current applications

■ **APPLICATIONS**

Consumer electronics such as VCR, TV and Monitor other electronic equipment.

■ **ORDERING CODE**

AL	35	RD	R22	K
①	②	③	④	⑤

① TYPE	
AL	Axial Inductor Standard type

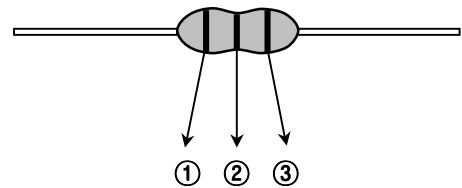
② DIMENSION [mm] max.	
35	6.0 × Φ4.0
40	7.2 × Φ5.0
45	8.0 × Φ6.0

③ TAPING CONFIGURATIONS [mm]	
RD	Radial Lead (M-forming) ※

④ NOMINAL INDUCTANCE [μH]	
R22	0.22
1R5	1.5
120	12

⑤ INDUCTANCE TOLERANCE [%]	
J	±5
K	±10

■ **MARKING**

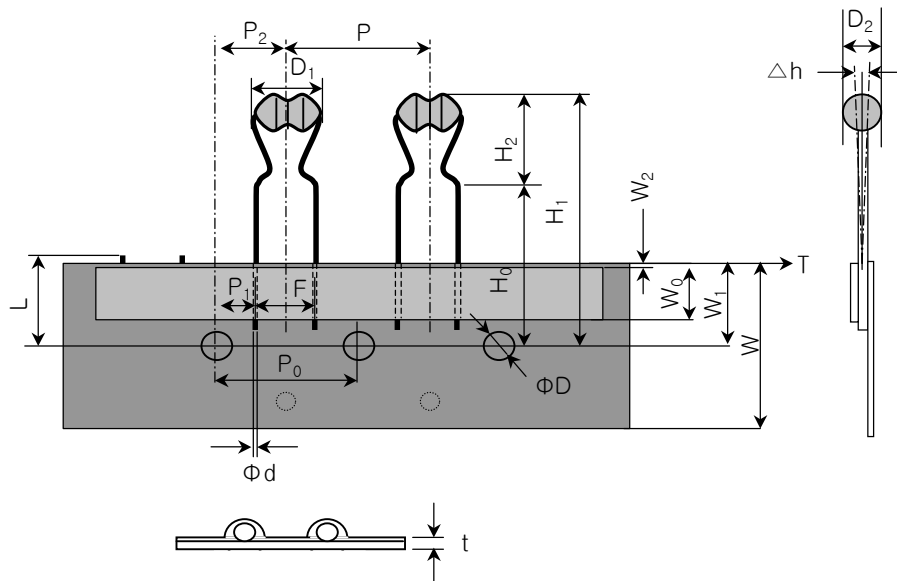


※ J GRADE → ③ Figure (Double coding)

Color	Inductance (μH)		
	1st	2st	Multi.
	①	②	③
Black	0		× 1
Brown	1		× 10
Red	2		× 100
Orange	3		× 1000
Yellow	4		-
Green	5		-
Blue	6		-
Purple	7		-
Gray	8		-
White	9		-
Gold	-		× 0.1
Silver	-		× 0.01

■ RADIAL TAPING DIMENSIONS & PACKING

● TAPING DIMENSIONS



Note1. No more than 3 consecutive pieces can be omitted

SYMBOL	DIMENSIONS		
	35	40	45
D_1	7.0max	8.0max	9.5max
D_2	4.0max	5.0max	6.0max
H_1	26.0max	27.5max	27.5max
H_2	9.0max	10.5max	10.5max
H_0	$6.5 \leq H_0 - W_1$	$6.5 \leq H_0 - W_1$	$6.5 \leq H_0 - W_1$
P	12.7 ± 1.0	12.7 ± 1.0	12.7 ± 1.0
P_0	12.7 ± 0.3	12.7 ± 0.3	12.7 ± 0.3
P_1	3.85 ± 0.5	3.85 ± 0.5	3.85 ± 0.5
P_2	6.35 ± 1.3	6.35 ± 1.3	6.35 ± 1.3
F	$5.0^{+0.8}_{-0.3}$	$5.0^{+0.6}_{-0.2}$	$5.0^{+0.6}_{-0.2}$
Δh	0.0 ± 2.0	0.0 ± 2.0	0.0 ± 2.0
W	$18^{+1.0}_{-0.5}$	$18^{+1.0}_{-0.5}$	$18^{+1.0}_{-0.5}$
W_0	6.0 ± 0.1	6.0 ± 0.1	6.0 ± 0.1
W_1	$9.0^{+1.0}_{-0.5}$	$9.0^{+1.0}_{-0.5}$	$9.0^{+1.0}_{-0.5}$
W_2	$T \geq W_2$	$T \geq W_2$	$T \geq W_2$
ΦD	4.0 ± 0.3	4.0 ± 0.3	4.0 ± 0.3
Φd	0.50 ± 0.05	0.50 ± 0.05	0.50 ± 0.05
L	11.0max	11.0max	11.0max
t	0.5 ± 0.2	0.5 ± 0.2	0.5 ± 0.2

P_0 : Accumulated error for 20 pitches is $\pm 1\text{mm}$

W_2 : Bonding tape must not protrude from the base tape.

● PACKING

SYMBOL	PACKING		
	35	40	45
INNER BOX(Q'TY)	2,000	1,000	1,500

■AVAILABLE INDUCTANCE RANGE

RANGE	TYPE	35			40			45																																	
		I _{max.} (mA)	INDUCTANCE (μH)	R _{dc} (mΩ)	I _{max.} (mA)	INDUCTANCE (μH)	R _{dc} (mΩ)	I _{max.} (mA)	INDUCTANCE (μH)	R _{dc} (mΩ)																															
0	1000	0.22	0.09	816	0.22	0.15																																			
										1	790	0.17	707	0.2																											
																		10	460	0.45	353	0.8	780	10	0.19																
																										100	150	3.3	174	3.3	260		0.85								
																																		1,000	55	28	48	42	85		8.9

ITEM-PART NUMBERS

AL35TYPE

Ordering code	Inductance [μ H]	Inductance Tolerance	Q (min.)	Self-resonant frequency [MHz] (min.)	DC Resistance [Ω] (max.)	Rated Current [mA] (max.)	Measuring frequency [MHz]
AL35 RD R22K	0.22	$\pm 10\%$ ($\pm 5\%$)	50	170	0.09	1000	25.2
AL35 RD R27K	0.27			160	0.10	980	
AL35 RD R33K	0.33			140	0.11	960	
AL35 RD R39K	0.39			130	0.12	940	
AL35 RD R47K	0.47			120	0.13	910	
AL35 RD R56K	0.56			110	0.14	880	
AL35 RD R68K	0.68			100	0.15	850	
AL35 RD R82K	0.82			90	0.16	820	
AL35 RD 1R0K	1.0			82	0.17	790	
AL35 RD 1R2K	1.2			70	0.18	760	
AL35 RD 1R5K	1.5			65	0.20	730	
AL35 RD 1R8K	1.8			57	0.22	700	
AL35 RD 2R2K	2.2			47	0.24	670	
AL35 RD 2R7K	2.7			40	0.26	640	
AL35 RD 3R3K	3.3			35	0.28	610	
AL35 RD 3R9K	3.9			33	0.30	580	
AL35 RD 4R7K	4.7			31	0.33	560	
AL35 RD 5R6K	5.6			27	0.36	540	
AL35 RD 6R8K	6.8			24	0.39	520	
AL35 RD 8R2K	8.2			22	0.42	490	2.52
AL35 RD 100K	10			21	0.45	460	
AL35 RD 120K	12			18	1.2	350	
AL35 RD 150K	15			16	1.3	330	
AL35 RD 180K	18			14	1.4	300	
AL35 RD 220K	22			13	1.5	270	
AL35 RD 270K	27			12	1.6	250	
AL35 RD 330K	33			11	1.8	235	
AL35 RD 390K	39			10	2.0	220	
AL35 RD 470K	47			9.5	2.2	200	
AL35 RD 560K	56			9.0	2.4	190	0.796
AL35 RD 680K	68	8.5	2.8	170			
AL35 RD 820K	82	8.0	3.0	155			
AL35 RD 101K	100	7.5	3.3	150			
AL35 RD 121K	120	6.8	4.2	140			
AL35 RD 151K	150	6.2	5.0	130			
AL35 RD 181K	180	5.6	6.0	125			
AL35 RD 221K	220	5.0	7.5	120			
AL35 RD 271K	270	4.6	11	105			
AL35 RD 331K	330	4.2	13	95			
AL35 RD 391K	390	3.8	15	90			
AL35 RD 471K	470	3.4	17	80			
AL35 RD 561K	560	3.0	19	75			
AL35 RD 681K	680	2.6	22	68			
AL35 RD 821K	820	2.2	25	60			
AL35 RD 102K	1000	2.0	28	55			

ITEM-PART NUMBERS

AL40TYPE

Ordering code	Inductance [μ H]	Inductance Tolerance	Q (min.)	Self-resonant frequency [MHz] (min.)	DC Resistance [Ω] (max.)	Rated Current [mA] (max.)	Measuring frequency [MHz]
AL40 RD R22K	0.22	± 10% (± 5%)	50	150	0.15	816	25.2
AL40 RD R27K	0.27			150	0.15	816	
AL40 RD R33K	0.33			150	0.15	816	
AL40 RD R39K	0.39			130	0.15	816	
AL40 RD R47K	0.47			130	0.15	816	
AL40 RD R56K	0.56			130	0.20	707	
AL40 RD R68K	0.68			120	0.20	707	
AL40 RD R82K	0.82			120	0.20	707	
AL40 RD 1R0K	1.0			100	0.20	707	
AL40 RD 1R2K	1.2			85	0.20	707	
AL40 RD 1R5K	1.5			70	0.22	674	
AL40 RD 1R8K	1.8			60	0.22	674	
AL40 RD 2R2K	2.2			55	0.25	632	
AL40 RD 2R7K	2.7			50	0.27	608	
AL40 RD 3R3K	3.3			45	0.30	577	
AL40 RD 3R9K	3.9			40	0.32	559	
AL40 RD 4R7K	4.7			35	0.35	534	
AL40 RD 5R6K	5.6			33	0.37	519	
AL40 RD 6R8K	6.8			27	0.40	500	
AL40 RD 8R2K	8.2			25	0.45	471	2.52
AL40 RD 100K	10			20	0.80	353	
AL40 RD 120K	12			18	0.90	333	
AL40 RD 150K	15			17	1.0	316	
AL40 RD 180K	18			15	1.2	288	
AL40 RD 220K	22			13	1.4	267	
AL40 RD 270K	27			11	1.7	242	
AL40 RD 330K	33			10.5	2.0	223	
AL40 RD 390K	39			10.0	2.4	204	
AL40 RD 470K	47			9.5	2.7	192	
AL40 RD 560K	56			9.0	2.9	185	
AL40 RD 680K	68			8.5	3.1	179	
AL40 RD 820K	82			7.5	3.3	174	0.796
AL40 RD 101K	100			6.8	3.3	174	
AL40 RD 121K	120	6.2	3.5	169			
AL40 RD 151K	150	5.7	3.7	164			
AL40 RD 181K	180	5.3	4.0	158			
AL40 RD 221K	220	4.0	5.2	138			
AL40 RD 271K	270	3.6	5.8	131			
AL40 RD 331K	330	3.3	6.5	124			
AL40 RD 391K	390	3.0	7.5	115			
AL40 RD 471K	470	2.8	8.0	111			
AL40 RD 561K	560	2.4	12.5	89			
AL40 RD 681K	680	2.2	14.0	84			
AL40 RD 821K	820	2.0	15.5	80	0.252		
AL40 RD 102K	1000	40	1.8	18.5		73	
AL40 RD 122K	1200	30	1.7	29.0		58	
AL40 RD 152K	1500		1.5	34.0		54	
AL40 RD 182K	1800		1.4	37.0		51	
AL40 RD 222K	2200		1.2	32.0	48		

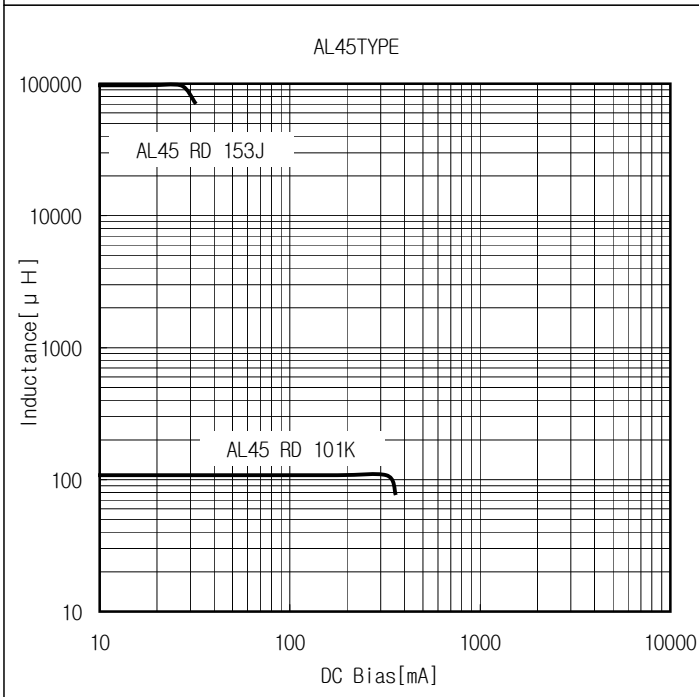
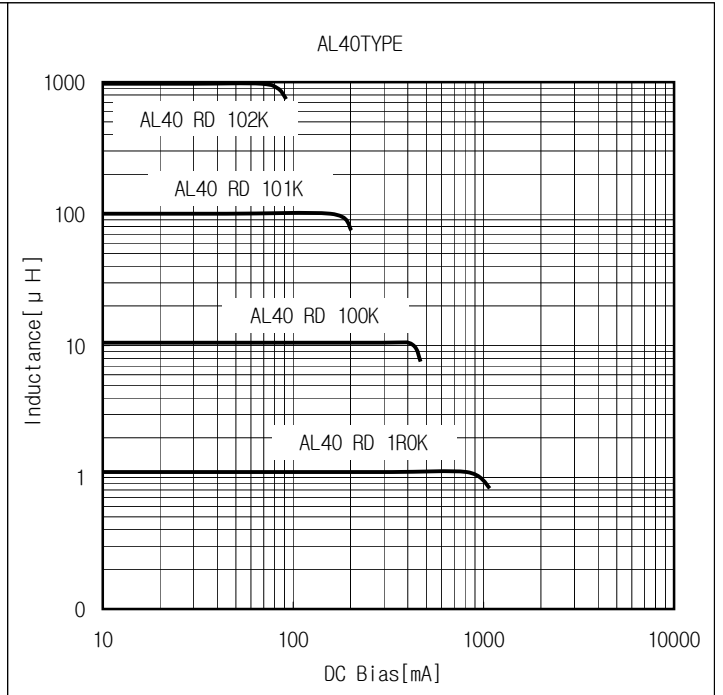
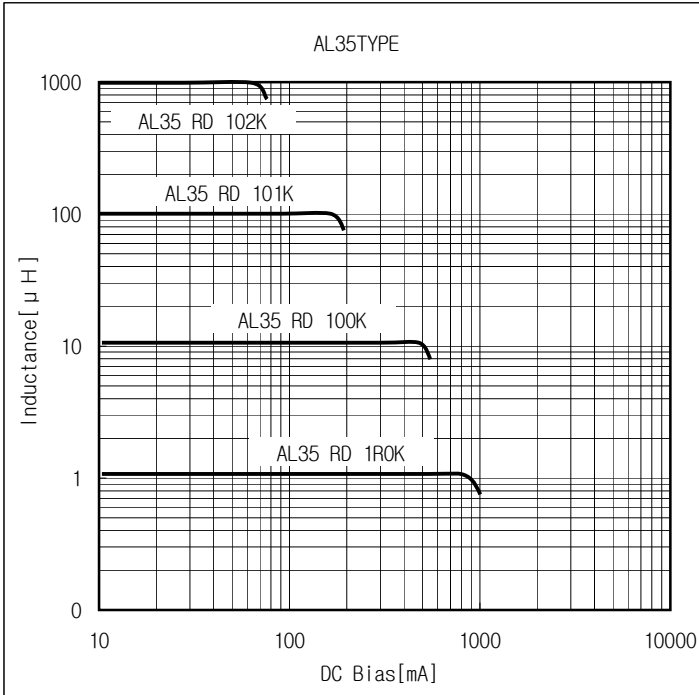
ITEM-PART NUMBERS

AL45TYPE

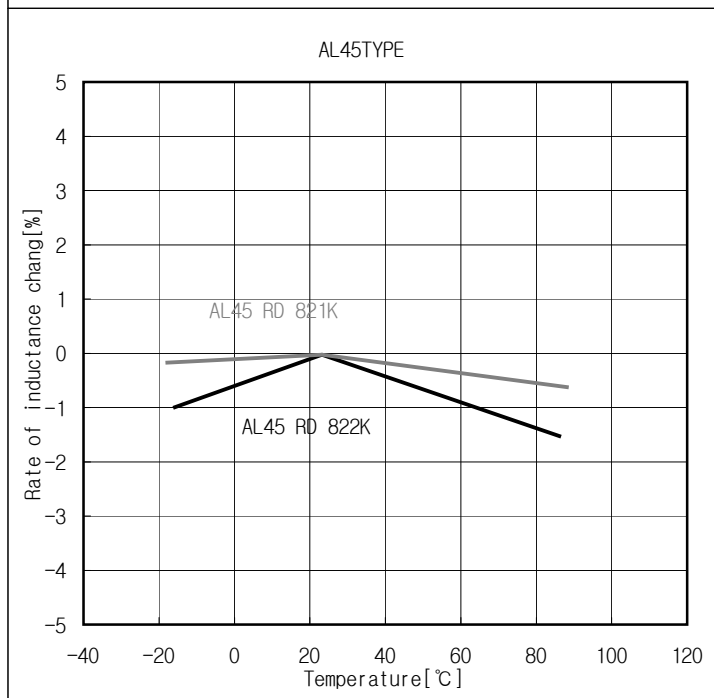
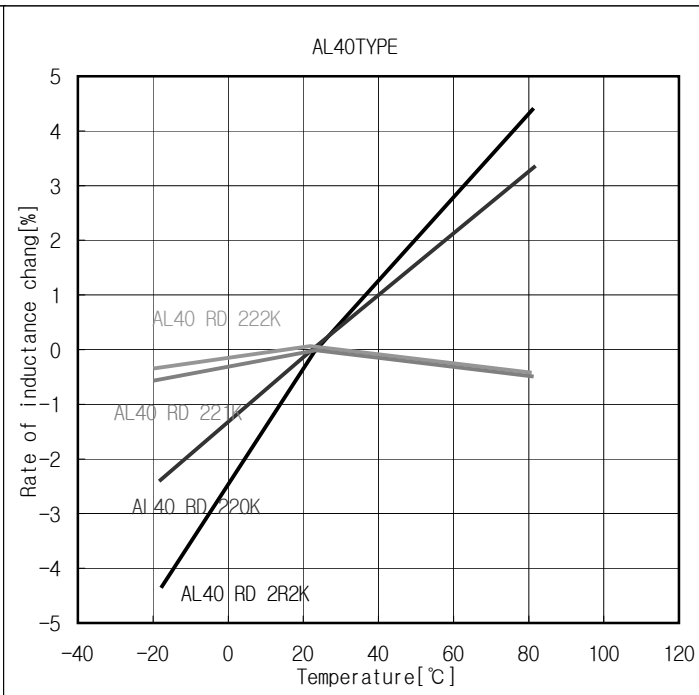
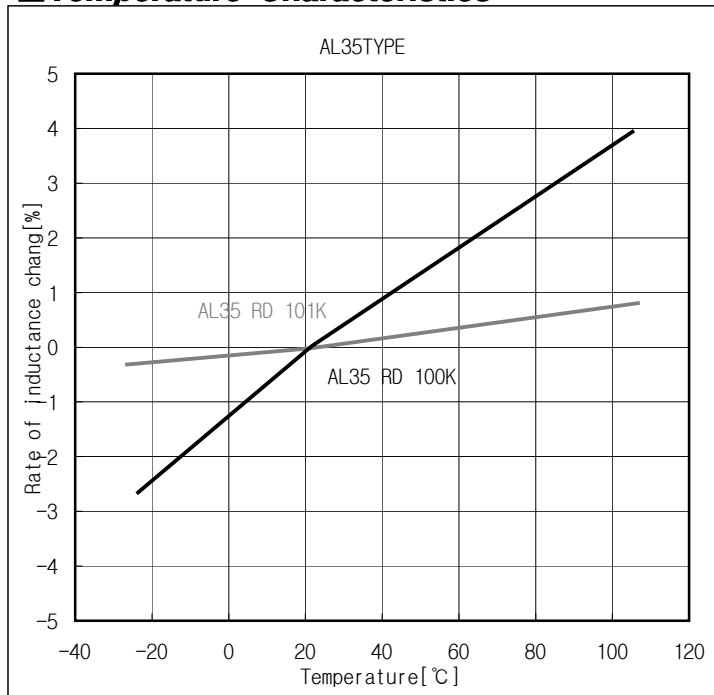
Ordering code	Inductance [μ H]	Inductance Tolerance	Q (min.)	Self-resonant frequency [MHz] (min.)	DC Resistance [Ω] (max.)	Rated Current [mA] (max.)	Measuring frequency [MHz]	
AL45 RD 100K	10	$\pm 10\%$ ($\pm 5\%$)	20	17.0	0.19	780	2.52	
AL45 RD 120K	12			14.0	0.22	730		
AL45 RD 150K	15			12.0	0.24	650		
AL45 RD 180K	18			10.5	0.26	610		
AL45 RD 220K	22			10.0	0.29	540		
AL45 RD 270K	27			9.5	0.32	480		
AL45 RD 330K	33			8.5	0.34	440		
AL45 RD 390K	39			8.0	0.42	410		
AL45 RD 470K	47			7.0	0.47	375		
AL45 RD 560K	56			6.8	0.52	340		
AL45 RD 680K	68		15	6.5	0.58	320	0.796	
AL45 RD 820K	82			6.3	0.64	285		
AL45 RD 101K	100		25	6.0	0.85	260		
AL45 RD 121K	120			5.4	1.00	240		
AL45 RD 151K	150		30	4.8	1.20	215		
AL45 RD 181K	180			4.0	1.50	195		
AL45 RD 221K	220		35	3.9	1.65	180		
AL45 RD 271K	270			3.6	2.15	160		
AL45 RD 331K	330		40	3.3	2.90	145		
AL45 RD 391K	390			3.0	3.25	135		
AL45 RD 471K	470		45	2.8	4.05	125		
AL45 RD 561K	560			2.4	4.45	115		
AL45 RD 681K	680		40	2.2	5.85	105		
AL45 RD 821K	820			2.0	6.60	90		
AL45 RD 102K	1000		45	1.8	8.90	85		0.252
AL45 RD 122K	1200			1.7	10.5	75		
AL45 RD 152K	1500			1.5	11.9	70		
AL45 RD 182K	1800			1.3	16.5	60		
AL45 RD 222K	2200		40	1.2	19.0	58		
AL45 RD 272K	2700			0.8	32.0	52		
AL45 RD 332K	3300			0.7	34.0	48		
AL45 RD 392K	3900			0.7	38.0	45		
AL45 RD 472K	4700			0.6	56.0	40		
AL45 RD 562K	5600			0.5	63.0	37		
AL45 RD 682K	6800			0.4	70.0	34		
AL45 RD 822K	8200		0.4	77.0	31			
AL45 RD 103K	10000		25	0.3	95.0	28	0.0796	
AL45 RD 123K	12000			0.2	110.0	25		
AL45 RD 153K	15000		20	0.1	160.0	21		

ELECTRICAL CHARACTERISTICS

■DC Bias Characteristics



Temperature Characteristics



■ Q vs Frequency Characteristics

