

Color code · Resistance tolerance · Resistance marking · E series numbers

Color code for discrete resistors

Color	1st Figure	2nd Figure	3rd Figure	Multiplier	Tolerance
Black	0	0	0	1	—
Brown	1	1	1	10	F: ±1%
Red	2	2	2	100	G: ±2%
Orange	3	3	3	1,000	A: ±0.05%
Yellow	4	4	4	10,000	—
Green	5	5	5	100,000	D: ±0.5%
Blue	6	6	6	1,000,000	C: ±0.25%
Purple	7	7	7	10,000,000	B: ±0.1%
Gray	8	8	8	—	—
White	9	9	9	—	—
Gold	—	—	—	0.1	J: ±5%
Silver	—	—	—	0.01	K: ±10%
Plain	—	—	—	—	M: ±20%

Resistance marking of chip resistors

3 digits : The 1st and 2nd digits are significant of resistance and the 3rd digit means the multiplier numbers of zero to follow. R means a decimal point. L means a decimal point followed by mΩ.

Example

153 : $15 \times 1000 = 15k\Omega$
 1R5 : 1.5Ω
 2L0 : $2m\Omega$

4 digits : The 1st, 2nd and 3rd digits are significant of resistance and the 4th digit means the multiplier numbers of zero to follow. R means a decimal point. L means a decimal point followed by mΩ.

Example

1542 : $154 \times 100 = 15.4k\Omega$
 R154 : 0.154Ω
 2L00 : $2m\Omega$

Resistance tolerance

Symbol	A	B	C	D	F	G	J	K	M
Resistance tolerance	±0.05%	±0.1%	±0.25%	±0.5%	±1%	±2%	±5%	±10%	±20%

Significant figures of Nominal resistance

E3	E6	E12	E24	E96	E192	E96	E192	E96	E192	E96	E192	E96	E192
10	10	10	10	100	100	178	178	316	316	562	562	562	562
			11	102	101	180	180	320	320	576	569	576	569
			12	105	102	182	182	324	324	576	576	576	576
		12	12	105	104	184	184	328	328	583	583	583	583
			13	106	105	187	187	332	332	590	590	590	590
			15	107	106	189	189	336	336	597	597	597	597
			15	109	107	191	191	340	340	604	604	604	604
			15	110	109	193	193	344	344	612	612	612	612
			15	111	110	196	196	348	348	619	619	619	619
			16	113	111	198	198	352	352	626	626	626	626
			16	113	113	200	200	357	357	634	634	634	634
			18	114	114	203	203	361	361	642	642	642	642
			18	115	115	205	205	365	365	649	649	649	649
			18	117	117	208	208	370	370	657	657	657	657
			20	118	118	210	210	374	374	665	665	665	665
			20	120	120	213	213	379	379	673	673	673	673
			22	121	121	215	215	383	383	681	681	681	681
			22	123	123	218	218	388	388	690	690	690	690
			22	124	124	221	221	392	392	698	698	698	698
			24	126	126	223	223	397	397	706	706	706	706
			24	127	127	226	226	402	402	715	715	715	715
			27	129	129	229	229	407	407	723	723	723	723
			27	130	130	232	232	412	412	732	732	732	732
			27	132	132	234	234	417	417	741	741	741	741
			30	133	133	237	237	422	422	750	750	750	750
			30	135	135	240	240	427	427	759	759	759	759
			33	137	137	243	243	432	432	768	768	768	768
			33	138	138	246	246	437	437	777	777	777	777
			33	140	140	249	249	442	442	787	787	787	787
			33	142	142	252	252	448	448	796	796	796	796
			39	143	143	255	255	453	453	806	806	806	806
			39	145	145	258	258	459	459	816	816	816	816
			39	147	147	261	261	464	464	825	825	825	825
			39	149	149	264	264	470	470	835	835	835	835
			47	150	150	267	267	475	475	845	845	845	845
			47	152	152	271	271	481	481	856	856	856	856
			47	154	154	274	274	487	487	866	866	866	866
			47	156	156	277	277	493	493	876	876	876	876
			47	158	158	280	280	499	499	887	887	887	887
			47	160	160	284	284	505	505	898	898	898	898
			47	162	162	287	287	511	511	909	909	909	909
			47	164	164	291	291	517	517	920	920	920	920
			47	165	165	294	294	523	523	931	931	931	931
			47	167	167	298	298	530	530	942	942	942	942
			47	169	169	301	301	536	536	953	953	953	953
			47	172	172	305	305	542	542	965	965	965	965
			47	174	174	309	309	549	549	976	976	976	976
			47	176	176	312	312	556	556	988	988	988	988

※抵抗器以外の製品はお問い合わせ下さい。

Ohmic code for resistance value

Tolerance $\geq 2\%$	
Resistance value (Ω)	3Digit Code
50 μ	50U
0.1m ~ 0.91m	L10 ~ L91
1m ~ 9.1m	1L0 ~ 9L1
10m ~ 91m	10L ~ 91L
0.1 ~ 0.91	R10 ~ R91
1 ~ 9.1	1R0 ~ 9R1
10 ~ 91	100 ~ 910
100 ~ 910	101 ~ 911
1k ~ 9.1k	102 ~ 912
10k ~ 91k	103 ~ 913
100k ~ 910k	104 ~ 914
1M ~ 9.1M	105 ~ 915
10M ~ 91M	106 ~ 916

Tolerance $\leq 1\%$	
Resistance value (Ω)	4Digit Code
0.1m ~ 0.976m	L100 ~ L976
1m ~ 9.76m	1L00 ~ 9L76
10m ~ 97.6m	10L0 ~ 97L6
0.1 ~ 0.976	R100 ~ R976
1 ~ 9.76	1R00 ~ 9R76
10 ~ 97.6	10R0 ~ 97R6
100 ~ 976	1000 ~ 9760
1k ~ 9.76k	1001 ~ 9761
10k ~ 97.6k	1002 ~ 9762
100k ~ 976k	1003 ~ 9763
1M ~ 9.76M	1004 ~ 9764
10M ~ 97.6M	1005 ~ 9765

NT73

Nominal resistances are expressed.

3 digits: The 1st and 2nd digits are significant and the 3rd digit means the multiplier number of zero to follow. R means a decimal point.

Example 153 : $15 \times 1000 = 15k\Omega$

LT73/LT73V

Nominal resistances are expressed.

4 digits: The 1st, 2nd and 3rd digits are significant and the 4th digit means the multiplier number of zero to follow.

R means a decimal point.

Example 3302 : $330 \times 100 = 33k\Omega$

LP73

Resistance Value Symbol	A	B	C	D	E	F	G	H
	1.0	1.1	1.2	1.3	1.5	1.6	1.8	2.0
J	K	L	M	N	P	Q	R	
2.2	2.4	2.7	3.0	3.3	3.6	3.9	4.3	
S	T	U	V	W	X	Y	Z	
4.7	5.1	5.6	6.2	6.8	7.5	8.2	9.1	
Resistance Value Multiplier								5
0 : 10^0								5.0
3 : 10^3								
1 : 10^1								
4 : 10^4								
2 : 10^2								
5 : 10^5								
Symbol for Temperature Coefficient of Resistance ($\times 10^{-6}/K$)								
0 : 5000								
1 : 4500								
2 : 4000								
3 : 3600								
4 : 3300								
5 : 3000								

(The above marking is for 1k Ω 3,600ppm/C)

SDT101A

	Nominal Resistance			Reference Temperature (0°C)	T. C. R.
	1st Figure	2nd Figure	Multiplier		
10 Ω	Brown	Black	Black	Black	Black
100 Ω	Brown	Black	Brown	Black	Black
500 Ω	Green	Black	Brown	Black	Black

LP

Resistance 1st. code.

Resistance 2nd. code.

Resistance multiplier

5th Band
T.C.R. code

4th Band
T.C.R. +150~+2400 $\times 10^{-6}/K$

T.C.R. code
T.C.R. +2500~+5000 $\times 10^{-6}/K$

Resistance Tolerance

Color	1st Figure	2nd Figure	Multiplier	Tolerance
Black	0	0	1	—
Brown	1	1	10	F : $\pm 1\%$
Red	2	2	100	G : $\pm 2\%$
Orange	3	3	1,000	—
Yellow	4	4	10,000	—
Green	5	5	—	—
Blue	6	6	—	—
Purple	7	7	—	—
Gray	8	8	—	—
White	9	9	—	—
Gold	—	—	0.1	J : $\pm 5\%$

Color Marking of T. C. R.

T.C.R. ($\times 10^{-6}/K$)	4th Band	5th Band
150	Black	Brown
250	Black	Red
350	Black	Orange
450	Black	Yellow
550	Black	Green
650	Black	Blue
750	Black	Purple
850	Black	Gray
950	Black	White
1000	White	Black
1200	White	Red
1400	White	Yellow
1600	White	Blue
1800	White	Gray
2000	Purple	Black
2200	Purple	Red
2400	Purple	Yellow
2500	—	Purple
3000	—	Gray
3300	—	White
3600	—	Black
4000	—	Yellow
4500	—	Orange
5000	—	Blue