

# STANDARD RESISTANCE VALUES & CODES

## STANDARD RESISTANCE VALUES-E192

For use with 0.1%, 0.25%, and 0.5% tolerance resistors

R Value ( )	Code	R Value ( )	Code	R Value ( )	Code	R Value ( )	Code	R Value ( )	Code	R Value ( )	Code
100	1000	147	1470	215	2150	316	3160	464	4640	681	6810
101	1010	149	1490	218	2180	320	3200	470	4700	690	6900
102	1020	150	1500	221	2210	324	3240	475	4750	698	6980
104	1040	152	1520	223	2230	328	3280	481	4810	706	7060
105	1050	154	1540	226	2260	332	3320	487	4870	715	7150
106	1060	156	1560	229	2290	336	3360	493	4930	723	7230
107	1070	158	1580	232	2320	340	3400	499	4990	732	7320
109	1090	160	1600	234	2340	344	3440	505	5050	741	7410
110	1100	162	1620	237	2370	348	3480	511	5110	750	7500
111	1110	164	1640	240	2400	352	3520	517	5170	759	7590
113	1130	165	1650	243	2430	357	3570	523	5230	768	7680
114	1140	167	1670	246	2460	361	3610	530	5300	777	7770
115	1150	169	1690	249	2490	365	3650	536	5360	787	7870
117	1170	172	1720	252	2520	370	3700	542	5420	796	7960
118	1180	174	1740	255	2550	374	3740	549	5490	806	8060
120	1200	176	1760	258	2580	379	3790	556	5560	816	8160
121	1210	178	1780	261	2610	383	3830	562	5620	825	8250
123	1230	180	1800	264	2640	388	3880	569	5690	835	8350
124	1240	182	1820	267	2670	392	3920	576	5760	845	8450
126	1260	184	1840	271	2710	397	3970	583	5830	856	8560
127	1270	187	1870	274	2740	402	4020	590	5900	866	8660
129	1290	189	1890	270	2700	407	4070	597	5970	876	8760
130	1300	191	1910	280	2800	412	4120	604	6040	887	8870
132	1320	193	1930	284	2840	417	4170	612	6120	898	8980
133	1330	196	1960	287	2870	422	4220	619	6190	909	9090
135	1350	198	1980	291	2910	427	4270	626	6260	920	9200
137	1370	200	2000	294	2940	432	4320	634	6340	931	9310
138	1380	203	2030	298	2980	437	4370	642	6420	942	9420
140	1400	205	2050	301	3010	442	4420	649	6490	953	9530
142	1420	208	2080	305	3050	448	4480	657	6570	965	9650
143	1430	210	2100	309	3090	453	4530	665	6650	976	9760
145	1450	213	2130	312	3120	459	4590	673	6730	988	9880

## STANDARD RESISTANCE VALUES-E24

For use with all 2% & 5% tolerance resistors

R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*
10	100	18	180	33	330	56	560
11	110	20	200	36	360	62	620
12	120	22	220	39	390	68	680
13	130	24	240	43	430	75	750
15	150	27	270	47	470	82	820
16	160	30	300	51	510	91	910

# STANDARD RESISTANCE VALUES & CODES

## STANDARD RESISTANCE VALUES-E96

For use with 1% tolerance resistors (except 0603 package chip resistors)

R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*
100	1000	133	1330	178	1780	237	2370	316	3160	422	4220	562	5620	750	7500
102	1020	137	1370	182	1820	243	2430	324	3240	432	4320	576	5760	768	7680
105	1050	140	1400	187	1870	249	2490	332	3320	442	4420	590	5900	787	7870
107	1070	143	1430	191	1910	255	2550	340	3400	453	4530	604	6040	806	8060
110	1100	147	1470	196	1960	261	2610	348	3480	464	4640	619	6190	825	8250
113	1130	150	1500	200	2000	267	2670	357	3570	475	4750	634	6340	845	8450
115	1150	154	1540	205	2050	274	2740	365	3650	487	4870	649	6490	866	8660
118	1180	158	1580	210	2100	280	2800	374	3740	499	4990	665	6650	887	8870
121	1210	162	1620	215	2150	287	2870	383	3830	511	5110	681	6810	909	9090
124	1240	165	1650	221	2210	294	2940	392	3920	523	5230	698	6980	931	9310
127	1270	169	1690	226	2260	301	3010	402	4020	536	5360	715	7150	953	9530
130	1300	174	1740	232	2320	309	3090	412	4120	549	5490	732	7320	976	9760

The chart above may be used to calculate the standard resistance code for any order of magnitude with the exception of the 0603 package chip resistors, which have a special chart on this page to illustrate how they are marked.

## STANDARD RESISTANCE VALUES-E96

For use with 1% tolerance 0603 package chip resistors

R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*	R Value ( )	Code*
100	01	133	13	178	25	237	37	316	49	422	61	562	73	750	85
102	02	137	14	182	26	243	38	324	50	432	62	576	74	768	86
105	03	140	15	187	27	249	39	332	51	442	63	590	75	787	87
107	04	143	16	191	28	255	40	340	52	453	64	604	76	806	88
110	05	147	17	196	29	261	41	348	53	464	65	619	77	825	89
113	06	150	18	200	30	267	42	357	54	475	66	634	78	845	90
115	07	154	19	205	31	274	43	365	55	487	67	649	79	866	91
118	08	158	20	210	32	280	44	374	56	499	68	665	80	887	92
121	09	162	21	215	33	287	45	388	57	511	69	681	81	909	93
124	10	165	22	221	34	294	46	392	58	523	70	698	82	981	94
127	11	169	23	226	35	301	47	402	59	536	71	715	83	953	95
130	12	174	24	232	36	309	48	412	60	549	72	732	84	976	96

The charts above and below may be used to determine the alternate marking coding formula of the 0603 package chip resistors, also found on page 5 part (subheading 5).

Example: 02C=102x10<sup>2</sup>=10.2K )

Code	A	B	C	D	E	F	G	H	X	Y	Z
Multiplier	10 <sup>0</sup>	10 <sup>1</sup>	10 <sup>2</sup>	10 <sup>3</sup>	10 <sup>4</sup>	10 <sup>5</sup>	10 <sup>6</sup>	10 <sup>7</sup>	10 <sup>-1</sup>	10 <sup>-2</sup>	10 <sup>-3</sup>