

# Marking Code for Chip Resistors

## 0603, 1% Chip Resistors and Rectangular Thin Film Chip Resistors

As the chart shows, a Two-Digit Number Code is assigned to each standard Resistance Value per E96 guidelines. (Decade Value Listing)

This is followed by an Alpha Code System which is a multiplier for the value table. Each letter from "A" — "Y" representing a specific multiplier.

### STANDARD RESISTANCE VALUES FOR THE 10 TO 100 DECADE (also usable in decade multiples or sub-multiples)

#### RESISTANCE TOLERANCE (+%)

E96		E96		E96		E96		E96		E96	
1%	#	1%	#	1%	#	1%	#	1%	#	1%	#
10.0	01	14.7	17	21.5	33	31.6	49	46.4	65	68.1	81
10.2	02	15.0	18	22.1	34	32.4	50	47.5	66	69.8	82
10.5	03	15.4	19	22.6	35	33.2	51	48.7	67	71.5	83
10.7	04	15.8	20	23.2	36	34.0	52	49.9	68	73.2	84
11.0	05	16.2	21	23.7	37	34.8	53	51.1	69	75.0	85
11.3	06	16.5	22	24.3	38	35.7	54	52.3	70	76.8	86
11.5	07	16.9	23	24.9	39	36.5	55	53.6	71	78.7	87
11.8	08	17.4	24	25.5	40	37.4	56	54.9	72	80.6	88
12.1	09	17.8	25	26.1	41	38.3	57	56.2	73	82.5	89
12.4	10	18.2	26	26.7	42	39.2	58	57.6	74	84.5	90
12.7	11	18.7	27	27.4	43	40.2	59	59.0	75	86.6	91
13.0	12	19.1	28	28.0	44	41.2	60	60.4	76	88.7	92
13.3	13	19.6	29	28.7	45	42.2	61	61.9	77	90.9	93
13.7	14	20.0	30	29.4	46	43.2	62	63.4	78	93.1	94
14.0	15	20.5	31	30.1	47	44.2	63	64.9	79	95.3	95
14.3	16	21.0	32	30.9	48	45.3	64	66.5	80	97.6	96

#### LETTER MULTIPLIER CROSS REFERENCE

A – 10  
 \* H or B – 100  
 C – 1,000  
 D – 10,000  
 E – 100,000  
 F – 1,000,000  
 X – 1  
 \* R or Y – 0.1  
 Z – 0.01  
 (Letter multipliers may also come in lower case.)

By combining a specific two digit number and a letter code you have a series of Numeric/Alpha digits that give you the complete E96 Resistance Value Codes for part marking.

\* The "B" and "Y" codes are being phased out due to their confusion with the numbers "8" and "4" respectively.

**#0603, ±1%  
Chip Marking**  
01B or H  
25C  
93D

**EXAMPLE:  
Explanation**  
01 means 10.0 and B or (H) = 100  
25 means 17.8 and C = 1,000  
93 means 90.9 and D = 10,000

**VALUE**  
10.0 x 100 = 1K Ohm  
17.8 x 1,000 = 17.8K Ohm  
90.9 x 10,000 = 909K Ohm