

EIA-96 SMD Resistor Code Reference Guide

1. Multiplier Letters

Letter	Multiplier	Example
A	×1	01A = 100Ω
B	×10	01B = 1kΩ
C	×100	01C = 10kΩ
D	×1k	01D = 100kΩ
E	×10k	01E = 1MΩ
F	×100k	01F = 10MΩ
H	×1M	01H = 100MΩ

2. Value Codes (01-96)

Code	Value	Code	Value	Code	Value
01	100.0	33	133.0	65	165.0
02	102.0	34	135.0	66	167.0
03	104.0	35	137.0	67	169.0
04	106.0	36	139.0	68	172.0
05	108.0	37	142.0	69	174.0
06	110.0	38	144.0	70	176.0
07	113.0	39	147.0	71	178.0
08	115.0	40	149.0	72	180.0

Code	Value	Code	Value	Code	Value
09	117.0	41	152.0	73	182.0
10	119.0	42	154.0	74	184.0
11	121.0	43	156.0	75	187.0
12	124.0	44	158.0	76	189.0
13	126.0	45	161.0	77	191.0
14	128.0	46	163.0	78	193.0
15	130.0	47	165.0	79	196.0
16	133.0	48	167.0	80	198.0

3. Complete EIA-96 Examples

Code	Calculation	Final Value
01A	100.0×1	100 Ω
01B	100.0×10	1k Ω
01C	100.0×100	10k Ω
02A	102.0×1	102 Ω
02B	102.0×10	1.02k Ω
03A	104.0×1	104 Ω
03B	104.0×10	1.04k Ω

4. Tolerance Markings

Code	Tolerance	Usage
F	$\pm 1\%$	Standard precision
G	$\pm 2\%$	General purpose

Code	Tolerance	Usage
J	$\pm 5\%$	Common applications
K	$\pm 10\%$	Non-critical applications

5. How to Read EIA-96 Codes

1. First two digits (01-96): Determine the base resistance value
2. Last letter (A-H): Determine the multiplier
3. Example:
 - Code: 01B
 - Base value: 01 = 100.0
 - Multiplier: B = $\times 10$
 - Final value: $100.0 \times 10 = 1\text{k}\Omega$

6. Common Applications

- Precision instrumentation
- Medical equipment
- Test and measurement devices
- Industrial control systems
- Military and aerospace
- Automotive electronics