

Passive Component Information

| E6 | E12 | E24 | E48 | E96 | E192 |
|-----|-----|-----|-----|-----|------|
| 100 | 100 | 100 | 100 | 100 | 100 |
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| E6 | E12 | E24 | E48 | E96 | E192 |
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| 220 | 220 | 220 | 215 | 215 | 215 |
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| E6 | E12 | E24 | E48 | E96 | E192 |
|-----|-----|-----|-----|-----|------|
| 470 | 470 | 470 | 464 | 464 | 464 |
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| 604 | 604 | 604 | | | |
| 612 | 612 | 612 | | | |
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| 634 | 634 | 634 | | | |
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| 690 | 690 | 690 | | | |
| 698 | 698 | 698 | | | |
| 706 | 706 | 706 | | | |
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| 732 | 732 | 732 | | | |
| 741 | 741 | 741 | | | |
| 750 | 750 | 750 | | | |
| 759 | 759 | 759 | | | |
| 768 | 768 | 768 | | | |
| 777 | 777 | 777 | | | |
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| 988 | 988 | 988 | | | |

| Series | Tol. | Comment |
|--------|--------|----------------------------------|
| E3 | 50% | Obsolete |
| E6 | 20% | Rare |
| E12 | 10% | Standard Carbon |
| E24 | 5%, 2% | Also found in 1% |
| E48 | 2% | Reduced stocking costs over E96 |
| E96 | 1% | Standard Metal Film |
| E192 | 0.5% | Also 0.25%, 0.1% and higher tol. |

| Color | Digits | Mult. | Tol. | TempCo |
|--------|--------|------------------|-------|-----------|
| Silver | | $\times 10^{-2}$ | 10% | |
| Gold | | $\times 10^{-1}$ | 5% | |
| Black | 0 | $\times 10^0$ | | |
| Brown | 1 | $\times 10^1$ | 1% | 100 ppm/C |
| Red | 2 | $\times 10^2$ | 2% | 50 ppm/C |
| Orange | 3 | $\times 10^3$ | | 15 ppm/C |
| Yellow | 4 | $\times 10^4$ | | 20 ppm/C |
| Green | 5 | $\times 10^5$ | 0.50% | |
| Blue | 6 | $\times 10^6$ | 0.25% | |
| Violet | 7 | $\times 10^7$ | 0.10% | |
| Gray | 8 | | | |
| White | 9 | | | |

Capacitors follow E12 Values

| Capacitor Tolerances | |
|----------------------|---------------------|
| B | $\pm 0.1\text{pF}$ |
| C | $\pm 0.25\text{pF}$ |
| D | $\pm 0.5\text{pF}$ |
| F | $\pm 1\%$ |
| G | $\pm 2\%$ |
| J | $\pm 5\%$ |
| K | $\pm 10\%$ |
| M | $\pm 20\%$ |
| Z | -20% to +80% |