

Current Electricity Equations and Data Sheet

$$I = Q/t$$

$$R = V/I$$

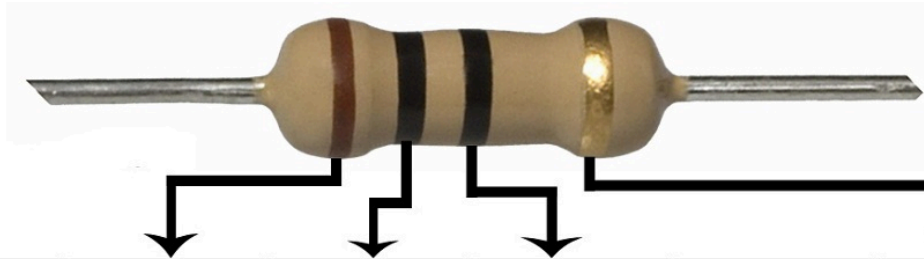
$$1 \text{ C} = 6.25 \times 10^{18} \text{ charges}$$

$$Q = It$$

$$V = IR$$

$$V = E/Q$$

| Common Prefixes used with SI Units | | | |
|---|-----------|---------------|--------------------|
| Prefix | Symbol | Meaning | Order of Magnitude |
| <i>giga-</i> | G | 1 000 000 000 | 10^9 |
| <i>mega-</i> | M | 1 000 000 | 10^6 |
| <i>kilo-</i> | k | 1 000 | 10^3 |
| <i>hecto-</i> | h | 100 | 10^2 |
| <i>deka-</i> | da | 10 | 10^1 |
| | base unit | 1 | 10^0 |
| <i>deci-</i> | d | 0.1 | 10^{-1} |
| <i>centi-</i> | c | 0.01 | 10^{-2} |
| <i>milli-</i> | m | 0.001 | 10^{-3} |
| <i>micro-</i> | μ | 0.000 001 | 10^{-6} |
| <i>nano-</i> | n | 0.000 000 001 | 10^{-9} |



| COLOR | 1 st BAND | 2 nd BAND | 3 rd BAND | No. of Zero to be Added | 4 th BAND |
|---------|------------------------------------|------------------------------------|----------------------|-------------------------|----------------------|
| | 1 ST Significant figure | 2 nd Significant figure | Multiplier | | Tolerance |
| Black | - | 0 | $\times 1$ | None | |
| Brown | 1 | 1 | $\times 10$ | 0 | |
| Red | 2 | 2 | $\times 100$ | 00 | |
| Orange | 3 | 3 | $\times 1000$ | 000 | |
| Yellow | 4 | 4 | $\times 10000$ | 0 000 | |
| Green | 5 | 5 | $\times 100000$ | 00 000 | |
| Blue | 6 | 6 | $\times 1000000$ | 000 000 | |
| Violet | 7 | 7 | $\times 10000000$ | 0 000 000 | |
| Grey | 8 | 8 | $\times 100000000$ | 00 0000 000 | |
| White | 9 | 9 | $\times 1000000000$ | 000 000 000 | |
| Gold | - | - | $\times 0.1$ | - | $\pm 5 \%$ |
| Silver | - | - | $\times 0.01$ | - | $\pm 10 \%$ |
| No Band | - | - | - | - | $\pm 20 \%$ |