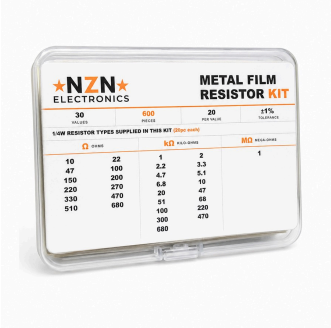
Click IT
STORE

TECHNICAL DATASHEET
Click IT SKU CLICK-IT-927670 · REV 2 · 2026-10-20

# 600pc Metal Film Resistor Kit

30 VALUES | 600 PCS | 10Ω - 1M | ±1% TOL | 1/4W | AXIAL

600 axial metal film resistors, 30 values from 10Ω to 1M, 20 of each. Each value is on its own paper tape printed with the value, in a clear storage case with a card listing all 30 values.




| PARAMETER | VALUE | CONDITIONS / NOTES |
|---|---|---|
| Resistor type | **Metal film, axial leads** | Through-hole; no polarity |
| Values | **30, 10Ω to 1M** | Full list below |
| Quantity | **20 per value, 600 total** | One printed paper tape per value |
| Rated power | **0.25W (1/4W)** | Per resistor |
| Recommended power | **0.125W or less** | Click IT recommendation: half the rating, so the part runs cool |
| Resistance tolerance | **±1%** | Brown fifth band |
| Marking | **5-band colour code** | Value also printed on each tape |
| Packaging | **Clear storage case** | Printed value card in the lid |

Evidence: kit parameter sheet (type, tolerance, rated power, values); Click IT stock inspection (tapes, case, lid card).

## KIT CONTENTS · 30 VALUES

20 pcs of each value below - 600 pcs total

| | | | | | |
|---|---|---|---|---|---|
| 10Ω | 22Ω | 47Ω | 100Ω | 150Ω | 200Ω |
| 220Ω | 270Ω | 330Ω | 470Ω | 510Ω | 680Ω |
| 1KΩ | 2KΩ | 2.2KΩ | 3.3KΩ | 4.7KΩ | 5.1KΩ |
| 6.8KΩ | 10KΩ | 20KΩ | 47KΩ | 51KΩ | 68KΩ |
| 100KΩ | 220KΩ | 300KΩ | 470KΩ | 680KΩ | 1MΩ |

## POWER CHECK

$P = V^2 / R$ (V = volts across the resistor)

| EXAMPLE | POWER | RESULT |
|---|---|---|
| 5V across 220Ω | **0.114W** | Within 0.125W |
| 3.3V across 100Ω | **0.109W** | Within 0.125W |
| 12V across 1KΩ | **0.144W** | Above 0.125W: use 2KΩ (0.072W) |
| 12V across 470Ω | **0.306W** | Over the 0.25W rating |

## READING THE 5-BAND CODE

| COLOUR | DIGIT | MULTIPLIER |
|---|---|---|
| Black | 0 | ×1 |
| Brown | 1 | ×10 |
| Red | 2 | ×100 |
| Orange | 3 | ×1K |
| Yellow | 4 | ×10K |
| Green | 5 | ×100K |
| Blue | 6 | ×1M |
| Violet | 7 | - |
| Grey | 8 | - |
| White | 9 | - |

Bands 1-3 are digits, band 4 is the multiplier and band 5 the tolerance (brown = ±1% on every resistor in this kit). Check with a multimeter if unsure.

**Example - 4.7KΩ:** Yellow Violet Black Brown Brown = 470 ×10 = 4700Ω ±1%

## LED RESISTOR

$R = (V_{supply} - V_{LED}) / I$

Red LED (about 2.0V) at 10 mA from 5V: (5 - 2.0) / 0.010 = 300Ω, so use 330Ω. From 3.3V: 130Ω, so use 150Ω. Calculated examples; check your LED's forward voltage.

## REVISION HISTORY

| REV | DATE | CHANGE |
|---|---|---|
| REV 2 | 2026-10-20 | Storage corrected to value-printed tapes in a clear case. Unsupported temperature-coefficient row removed. Recommended power, power-check and LED resistor tables added. Feature and application lists moved to the product page. |
| REV 1 | 2026-07-06 | First issue. |