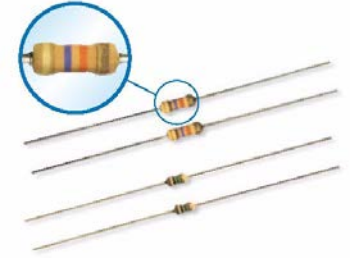
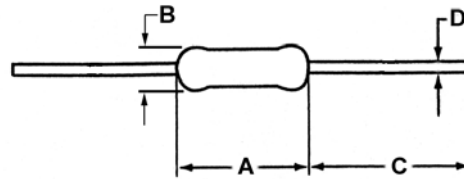


- Features:
- Specialized materials, processes and controls ensure a part that is impervious to moisture
 - Small size with high power density
 - Auto sequencing / insertion capable
 - Low cost replacement in many applications using metal glaze resistors
 - RoHS compliant / lead-free

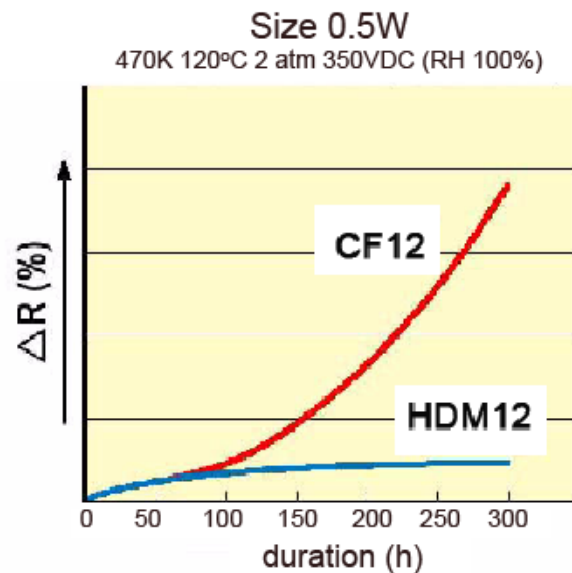
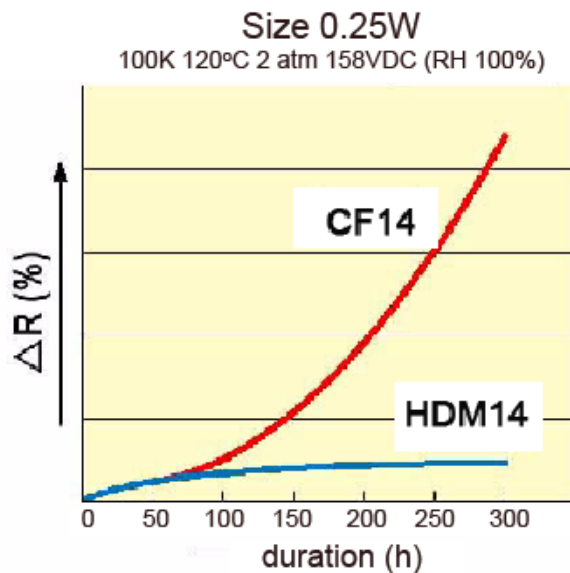


| Electrical Specifications | | | | |
|---------------------------|-----------------------------|-----------------------------|--------------------------|-------------------------------|
| Type / Code | Power Rating (Watts) @ 70°C | Maximum Working Voltage (1) | Maximum Overload Voltage | Ohmic Range (Ω) and Tolerance |
| | | | | 1%, 2%, 5% |
| HDM14 | 0.25W | 300V | 600V | 1 - 2.2M |
| HDM12 | 0.5W | 350V | 700V | 1 - 2.2M |

(1) Lesser of \sqrt{PR} or maximum working voltage.



| Mechanical Specifications | | | | | |
|---------------------------|--------------------|--------------------|-------------------------|--------------------|--------|
| Type / Code | A Body Length | B Body Diameter | C Lead Length (Bulk) | D Lead Diameter | Unit |
| HDM14 | 0.126 + 0.008 /- 0 | 0.071 ± 0.008 | 1.102 ± 0.118 | 0.018 ± 0.002 | inches |
| | 3.20 + 0.20 /- 0 | 1.80 ± 0.20 | 28.00 ± 3.00 | 0.45 ± 0.05 | mm |
| HDM12 | 0.236 ± 0.012 | 0.094 ± 0.008 | 1.102 ± 0.118 | 0.024 ± 0.001 | inches |
| | 6.00 ± 0.30 | 2.40 ± 0.20 | 28.00 ± 3.00 | 0.60 ± 0.02 | mm |



| Performance Characteristics | | |
|---|---|---|
| Item | Performance or Quality Acceptance | Test Condition and Method |
| TCR - Temperature Coefficient of Resistance | R < 100KΩ: -500 ~ +350ppm/°C 100KΩ ≤ R < 1MΩ: -700 ~ 0ppm/°C R ≥ 1MΩ: -1500 ~ 0ppm/°C | Measure resistance (R ₀) at room temperature (t), after that, measure again the resistance (R) at 100°C higher than room temperature. $TCR = \frac{R-R_0}{R_0} \times \frac{10^9}{(t+100)-t} \text{ (ppm/°C)}$ |
| Overload (Short Time) | Change of resistance ≤±(0.75% + 0.05Ω) | Apply the 2.5 times rated voltage or max overload voltage whichever is lower for 5 seconds and leave in room temperature for one hour after test. |
| Damp heat (Steady State) | Change of resistance R < 100KΩ: ≤±(3% + 0.05Ω) R ≥ 100KΩ: ≤±(5% + 0.05Ω) | In the chamber having temperature 40±2°C and relative humidity 93±3%, apply one percent of the power rating, 1.5 hour ON, 0.5 hour OFF for 1000 hours and leave in room temperature for one hour after test. |
| Load Life | Change of resistance R < 100KΩ: ≤±(2% + 0.05Ω) R ≥ 100KΩ: ≤±(3% + 0.05Ω) | At 70±2°C, apply rated DC voltage 1.5 hour ON, 0.5 hour OFF for 1000 hours and leave in room temperature for one hour after test. |
| Pressure Cooker Bias Test | Change of resistance ≤±(20% + 0.05Ω) | 121°C, 2atm, 98-100%RH. Apply the rated DC voltage for 100 hours. |

Reference standards: JIS C5201-1, IEC60115-1

How to Order

