

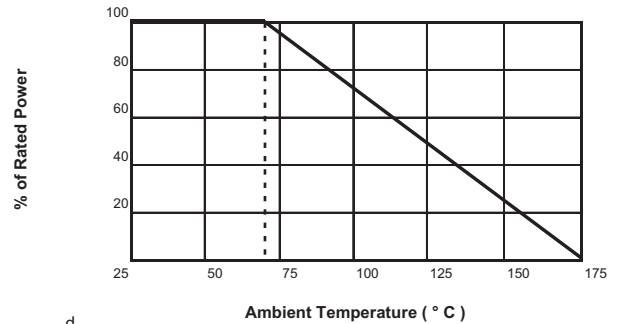
## MOULDED RESISTORS

**Series:** RNC

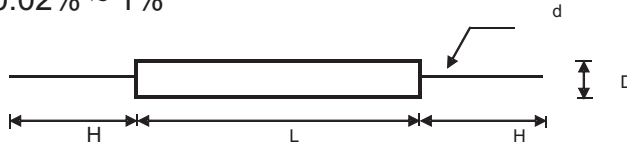
**Derating Curve**

**Features:**

- ▶ High grade alumina core.
- ▶ Encapsulated with compression moulded
- ▶ Phenolic plastic material.
- ▶ Flame resistant.
- ▶ Resistance range 10E~1M.
- ▶ TCR's : 10, 15, 25, 50, 100 ppm/°C.
- ▶ Tolerance 0.02% ~ 1%



**Dimensions:**



**Physical Data :**

| TYPE   | RATED POWER<br>70° C | DIMENSION (mm) |            |         |             | Max. Working Voltage |
|--------|----------------------|----------------|------------|---------|-------------|----------------------|
|        |                      | L              | D          | H (min) | d           |                      |
| RNC 55 | 0.125W               | 6.35 ± 0.8     | 2.39 ± 0.8 | 30      | 0.60 ± 0.05 | 200V                 |
| RNC 60 | 0.25W                | 9.5 ± 1.5      | 3.18 ± 0.9 | 30      | 0.60 ± 0.05 | 250V                 |

**Performance Data :**

| TEST                            | PROCEDURE   | SPEC.   |
|---------------------------------|---|---|
| Dielectric Withstanding Voltage | V-Block Method, 3X Rated Voltage<br>Duration : 1 Min.   | $\Delta R < \pm (0.5\% + 0.01 \text{ Ohm})$<br>No Breakdown         |
| Insulation Resistance           | V-Block Method, DC 500V<br>Duration : 1 Min.  | 10, 000 M Ohm   |
| Temp. Cycling                   | 5 cycles<br>of - 65°C, 25°C, +155°C, 25°C   | $\Delta R < \pm (0.2\% + 0.01 \text{ Ohm})$                         |
| Short Time Overload             | 2.5X Rated Voltage<br>Duration : 5 sec.   | $\Delta R < \pm (0.2\% + 0.01 \text{ Ohm})$                         |
| Damp Heat Steady State          | 40°C/95% relative humidity,<br>Duration : 56 Day.   | $\Delta R < \pm (0.4\% + 0.01 \text{ Ohm})$                         |
| Load Life                       | Rated Voltage at 70°C ambient<br>Duration : 2000 Hrs.   | $\Delta R < \pm (0.5\% + 0.01 \text{ Ohm})$                         |
| Robustness of Terminations      | Tensile : 10N Duration: 10 Sec.<br>Bending : 180°, > 3 Bends<br>Torsion : 3 Rotation of 360° Each | $\Delta R < \pm (0.2\% + 0.01 \text{ Ohm})$<br>No Mechanical Damage |
| Resistance to Soldering Heat    | Temp. 260°C ± 5°C<br>Duration : 10 Sec.   | $\Delta R < \pm (0.1\% + 0.01 \text{ Ohm})$                         |
| Shock (Medium Impact)           | 1 Km/S <sup>2</sup>   | $\Delta R < \pm (0.2\% + 0.01 \text{ Ohm})$                         |
| Vibration (High Frequency)      | 10 to 2000 Hz: m/S <sup>2</sup>   | $\Delta R < \pm (0.2\% + 0.01 \text{ Ohm})$                         |
| Low Temp. Exposure              | At - 65°C<br>Duration : 2 Hrs.  | $\Delta R < \pm (0.15\% + 0.01 \text{ Ohm})$                        |
| High Temp. Exposure             | At +155°C<br>Duration : 16 Hrs. No Load Condition   | $\Delta R < \pm (2\% + 0.05 \text{ Ohm})$                           |
| Solderability                   | Dip Method, Solder Bath<br>Temp. 230°C ± 5 °C. Duration 5 Sec.                                    | > 95% Coverage  |
| Resistance to Solvent           | Solvent : Trichloroethylene<br>Duration : 3 Min.  | Marking should be legible   |