

不燃性巻線固定抵抗器  
Non Flammable Wire-Wound Fixed Resistor

**KNY** series

- プリント基板自立実装タイプ
- PCB direct mounting type
- RoHS対応品
- RoHS complied



■電気的、機械的特性 Electrical and mechanical characteristics

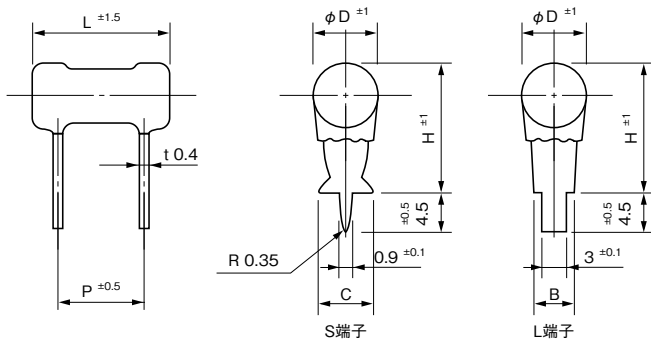
| 特性<br>Characteristics                                | 規格値<br>Standards   | 試験方法<br>Test methods                          |
|--|--|---|
| 抵抗値と抵抗値許容差<br>Resistance and Resistance tolerance    | 公称抵抗値<br>Resistance nominal<br>1Ω ≤ ±5% (J)<br>1Ω > ±10% (K)   |   |
| 抵抗温度特性<br>Temperature coefficient                    | 20Ω ≤ ±260ppm/°C max.<br>20Ω > ±400ppm/°C max.   |   |
| 定格負荷<br>Power rating load                            | △R/R ≤ ± (1%+0.05Ω)<br>表面温度上昇 (temperature) 350°C max.   |   |
| 短時間過負荷<br>Short-time overload                        | アーク焼損等の異常なきこと<br>no evidence of arc damage etc.<br>△R/R ≤ ± (2%+0.05Ω)                               | 定格電力×10倍 5秒間負荷<br>1000% rated power 5 seconds |
| 絶縁抵抗<br>Insulation resistance                        | 20MΩ min.  | DC500V  |
| 耐電圧<br>Dielectric withstanding voltage               | 機械的損傷及び絶縁破壊なきこと<br>no evidence of mechanical damage or insulation breakdown<br>△R/R ≤ ± (0.1%+0.05Ω) | AC800V 1 minute                               |
| 端子強度<br>Terminal strength                            | 機械的損傷なきこと<br>no evidence of mechanical damage  | 引張り(Pull) 44N 30 seconds                      |
| 抵抗体強度<br>Resistor strength                           | 機械的損傷なきこと<br>no evidence of mechanical damage  | 2W~10W 98N 10 seconds                         |
| 耐振性 (KNYS 5~10Wは除く)<br>Vibration (Except KNYs 5~10W) | 機械的損傷なきこと<br>no evidence of mechanical damage  | 取付け:基板実装状態<br>X, Y 各 2 hours each             |
| 半田耐熱<br>Soldering heat                               | 機械的損傷、外観劣化なきこと<br>no evidence of mechanical damage<br>△R/R ≤ ± (1%+0.05Ω)                            | 350°C 3 seconds                               |
| 半田付け性<br>Solderability                               | 75%以上新しい半田で覆われること<br>75% coverage min. with new solder   | 250°C 3 seconds                               |

■耐候的特性 Environmental characteristics

| 特性<br>Characteristics                          | 規格値<br>Standards   | 試験方法<br>Test methods  |
|--|--|---|
| 耐熱性<br>Heat resistance                         | 標印、絶縁被覆に著しい損傷なきこと<br>no deterioration of protective coatings or markings                     | 350±5°C 2 hours   |
| 熱衝撃<br>Thermal shock                           | 機械的損傷なきこと<br>no evidence of mechanical damage<br>△R/R ≤ ± (2%+0.05Ω)                         | 定格負荷30分間 → -40°C 15分間<br>power rating load → -40°C 15 minutes                   |
| 耐湿性 (定常状態)<br>Humidity (Steady state)          | 標印、絶縁被覆に異常なきこと<br>no deterioration of protective coatings or markings<br>△R/R ≤ ± (3%+0.05Ω) | 成極DC100V<br>40°C 95%RH 500 hours  |
| 耐久性 (耐湿負荷)<br>Durability (Moisture resistance) | 標印、絶縁被覆に異常なきこと<br>no deterioration of protective coatings or markings<br>△R/R ≤ ± (3%+0.05Ω) | 10%負荷 rated power load<br>90 minutes ON 30 minutes OFF<br>40°C 95%RH 1000 hours |
| 耐久性 (定格負荷)<br>Durability (Nominal load)        | 標印、絶縁被覆に異常なきこと<br>no deterioration of protective coatings or markings<br>△R/R ≤ ± (5%+0.05Ω) | 100%負荷 rated power load<br>90 minutes ON 30 minutes OFF<br>70°C 1000 hours      |
| 難燃性 (過負荷)<br>Flame resistance (Over load)      | 燃焼しないこと<br>no evidence of flaming or arcing  | 定格電力の 1~15倍<br>100~1600% rated power load                                       |

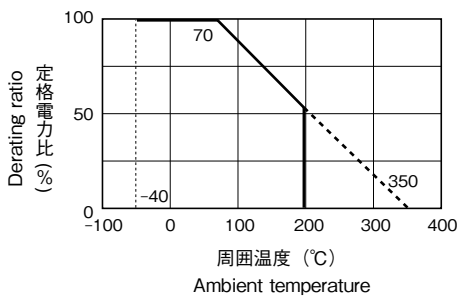
■規格 Standards

●形状・寸法 Configuration (mm)

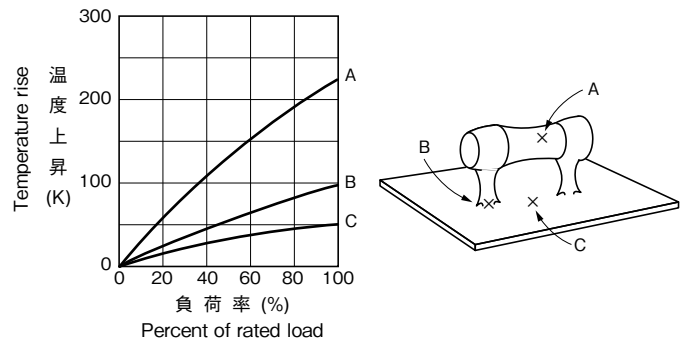


| 形状<br>Type | 定格電力 (W)<br>Power Rating | 寸法 Dimensions (mm) |    |      |      |     |      | 抵抗値範囲 (Ω)<br>Resistance Range |
|------------|--------------------------|--------------------|----|------|------|-----|------|-------------------------------|
|            |                          | φD                 | L  | P    | B    | C   | H    |                               |
| KNYS 2W    | 2                        | 5                  | 15 | 7.5  | —    | 3.2 | 15.0 | 0.1 ~ 150                     |
|            | 3W                       | 3                  | 7  | 20   | 12.5 | —   | 4.5  | 0.22 ~ 330                    |
| KNYL 5W    | 5                        | 9                  | 25 | 15.0 | 5.5  | —   | 21.5 | 0.33 ~ 560                    |
|            | 7W                       | 7                  | 9  | 40   | 30.0 | 5.5 | —    | 0.68 ~ 1.2k                   |
|            | 10W                      | 10                 | 9  | 53   | 42.5 | 5.5 | —    | 1.0 ~ 1.8k                    |
| KNYS 5W    | 5                        | 9                  | 25 | 15.0 | —    | 6.5 | 21.5 | 0.33 ~ 560                    |
|            | 7W                       | 7                  | 9  | 40   | 30.0 | —   | 6.5  | 0.68 ~ 1.2k                   |
|            | 10W                      | 10                 | 9  | 53   | 42.5 | —   | 6.5  | 1.0 ~ 1.8k                    |

●定格電力軽減曲線 Power Derating Curve



●表面温度上昇 Temperature Rise



■標準抵抗値 (Ω)

Standard resistance values JIS-E24 series

抵抗値許容差

Resistance tolerance

$R \geq 1\Omega \dots \pm 5\%$  (J)

$R < 1\Omega \dots \pm 10\%$  (K)

■受注生産品 Products by order

■品番コード Explanation of Part Number

KNYS 2W R56 K / RO

