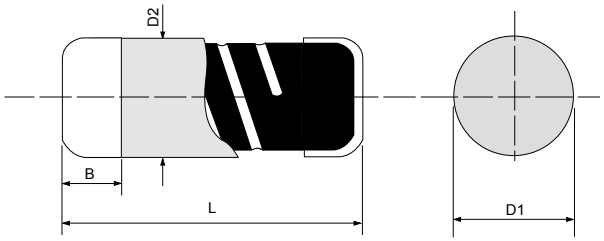
# SLC
# Slug Resistor Center Coated






## Features

- Suitable for Clip-in (embedded) application like switches with neon indicators, neon/LED modules, LED display., etc.
- Conductive film is enhanced to withstand abrasions, impacts, and corrosions as well.
- Specially treated metal caps withstand abrasions, impacts and corrosions, so as to reduce contact resistance during operation.
- Products meet RoHS requirements and do not contain substances of very high concern identified by European Chemicals Agency

## DIMENSIONS

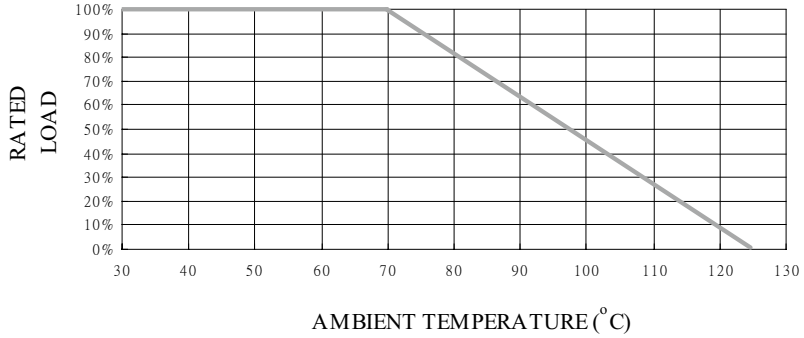
| Type | Body Length (L, mm) | Cap Diameter (D1, mm) | Body Diameter (D2, mm) | Soldering Spot (B, mm) | Net Weight Per 1000 pcs |
|---|---|---|---|---|---|
| SLC16 | 3.52 ± 0.15 | 1.35 ± 0.1 | D1+0.02/ -0.15 | 0.6 Min. | 17 grams |
| SLC25 | 5.90 ± 0.20 | 2.20 ± 0.1 | D1+0.02/ -0.2 | 1.0 Min. | 66 grams |
| SLC51 | 8.50 ± 0.50 | 3.00 ± 0.2 | D1+0.05/ -0.35 | 1.3 Min. | 186 grams |

## ELECTRICAL SPECIFICATIONS

| Type | Power Rating (at 70°C) | Maximum Working Voltage | Maximum Overload Voltage | Tolerance | Resistance Range |
|---|---|---|---|---|---|
| SLC16 | 1/6W | 225VAC rms | 350VAC rms | ±5%, ±10% | 1Ω ~ 1MΩ |
| SLC25 | 1/3W | 300VAC rms | 600VAC rms | ±5%, ±10% | 1Ω ~ 4.7MΩ |
| SLC51 | 1/2W | 350VAC rms | 700VAC rms | ±5%, ±10% | 10Ω ~ 9.1MΩ |

**Special sizes, values, and specifications not listed available on special order.**

## POWER DERATING CURVE



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## PART NUMBER

Example: SLC25K10K0TKZBK500

| SLC25 | K | 10K0 | TKZ | BK500 |
|---|---|---|---|---|
| Type | Tolerance | Resistance | TCR | Packaging |
| | J (5%)<br>K (10%) | 10KΩ<br>**4-character code**<br>containing -<br>3 significant digits<br>1 letter multiplier<br>OHM MULTIPLIER<br>R = 1<br>K = $10^3$<br>M = $10^6$<br>G = $10^9$ | **3-character code**<br>TKZ = Default Product Temperature Coefficient.<br>Information of typical product temperature coefficient can be found in the Technical Summary section of the datasheet.* | Bulk 500 pieces<br>**5-character code**<br>BK = Bulk<br>BK + Quantity |

*** For the availabilities of non-default temperature coefficient, please check with us. Reference for TCR letter codes can be found in section (4) of Part Number Construction in the Appendices.**

## TECHNICAL SPECIFICATIONS

| Characteristics | Limits |
|---|---|
| Dielectric Withstanding Voltage, VAC or DC | 250 |
| Temperature Coefficient, PPM / °C* | +200~-800 |
| Operating Temperature Range, °C | -55 ~ +125 |
| Insulation Resistance, MΩ | >$10^2$ |

*** Not applicable to all resistance values. Please check with us regarding the PPM of specific resistance value(s).**

## PERFORMANCE SPECIFICATIONS

| Characteristics | Test Conditions | Limits |
|---|---|---|
| Short Time Over Load | **IEC 60115-1 4.13**<br>5 seconds 2.5x rated voltage (not over max. overload voltage) | ±1% |
| Load Life In Humidity | **IEC 60115-1 4.24**<br>56 days rated load (not over max. working voltage) at (40±2)°C and (93±3)% relative humidity | ±5% |
| Load Life 1,000 hours | **IEC 60115-1 4.25.1**<br>Rated load (not over max. working voltage) with 1.5 hours ON, 0.5 hours OFF, at (70±2)°C | ±5% |
| Resistance To Soldering Heat | **IEC 60115-1 4.18.2**<br>Dip the resistor into a solder bath measured (260±5)°C and hold it for a 10±1 seconds | ±1% |
| Vibration | **IEC 60115-1 4.22**<br>Six hours in each parallel and axial direction with a simple harmonic motion having an amplitude of 0.75mm and 10 to 500 Hz. | ±1% |
| Thermal Endurance | **IEC 60115-1 4.25.3**<br>1000 hours at 125°C without load | ±1% |
| Thermal Shock | **IEC 60115-1 4.19**<br>-55°C 30minutes, +125°C 30minutes, 5 cycles | ±2% |