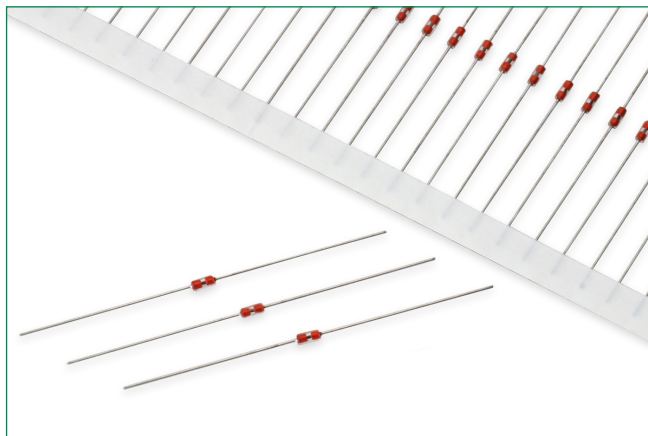


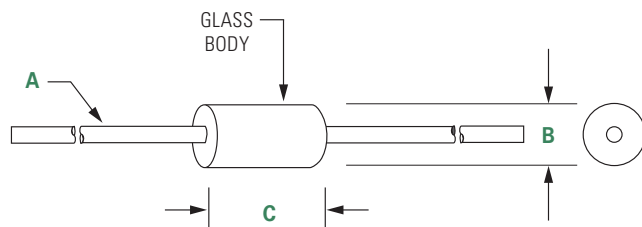
### USUG1000 Series UL Recognized DO-35 Glass Encapsulated Thermistors



#### Agency Approvals

| AGENCY                                                                            | AGENCY FILE NUMBER |
|-----------------------------------------------------------------------------------|--------------------|
|  | E232830            |

#### Dimensions



Dimensions shown in inches.

| A                                                          | B             | C             |
|------------------------------------------------------------|---------------|---------------|
| 0.020" $\pm 0.002$ "<br>24 AWG Tinned CCS<br>1.0" Long Min | 0.075"<br>Max | 0.160"<br>Max |

#### Packaging

| Packaging Option | Packaging Code | Standard Quantity | Standard |
|------------------|----------------|-------------------|----------|
| Tape and Reel    | -TR            | 5000              | EIA-296  |

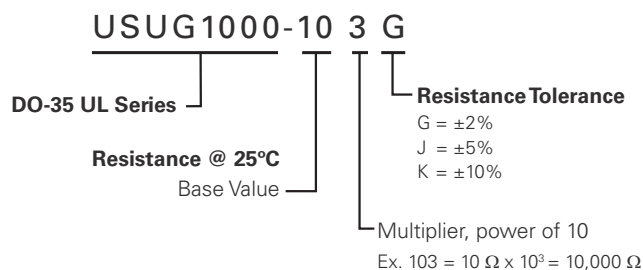
#### Description

Littelfuse low cost interchangeable glass encapsulated thermistors are manufactured using super stable, precision NTC chips which are hermetically sealed in a glass (DO-35 diode style) package. The result is a device which exhibits excellent long term reliability and stability even when subjected to severe environmental or thermal conditions. They are well suited for uses where their interchangeability eliminates the necessity for costly individual circuit calibration. Their uniform dimensions and axial lead configuration make them especially suitable for use with automatic insertion equipment.

#### Features

- Temperature rating = -40 to +150°C
- Hermetically sealed glass package
- Excellent long-term stability
- Tinned CSS Lead Wires are Solderable or Weldable

#### Part Numbering System



**Note:** Not all combinations of Part Number codes are available. Contact Littelfuse for details.

## USUG1000 Series UL Recognized DO-35 Glass Encapsulated Thermistors

### Specifications

| Part Number   | Resistance Ohms @ 25°C | *Resistance Tol. ± % @ 25°C | R-T Curve | Temperature Coefficient (%/°C) @ 25°C | Beta (K) 0-50°C | Max. Power Rating (mW) | Dissipation Constant, Nominal (mW/°C) | Temperature Rating (°C) |
|---------------|------------------------|-----------------------------|-----------|---------------------------------------|-----------------|------------------------|---------------------------------------|-------------------------|
| USUG1000-103G | 10000                  | 2                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-103J | 10000                  | 5                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-103K | 10000                  | 10                          | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-203G | 20000                  | 2                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-203J | 20000                  | 5                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-203K | 20000                  | 10                          | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-253G | 25000                  | 2                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-253J | 25000                  | 5                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-253K | 25000                  | 10                          | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-303G | 30000                  | 2                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-303J | 30000                  | 5                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-303K | 30000                  | 10                          | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-503G | 50000                  | 2                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-503J | 50000                  | 5                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-503K | 50000                  | 10                          | J         | -3.67                                 | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-104G | 100000                 | 2                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-104J | 100000                 | 5                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-104K | 100000                 | 10                          | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-254G | 250000                 | 2                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-254J | 250000                 | 5                           | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |
| USUG1000-254K | 250000                 | 10                          | J         | —                                     | 3892            | 20                     | 2                                     | -40 to +150             |

\*Resistance tolerances of ± 1%, 2%, and 5% are available upon request

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