



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

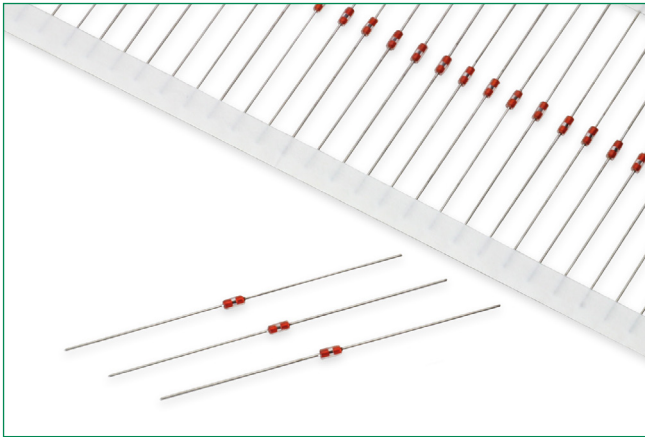
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## DO-35 Standard Series Glass Encapsulated Thermistors



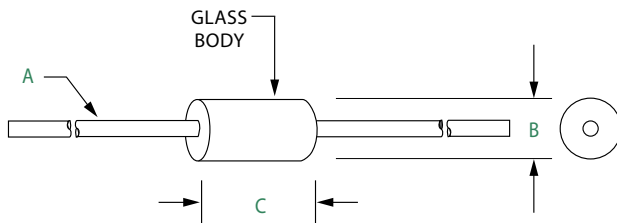
### Description

Littelfuse low cost glass encapsulated thermistors are manufactured using super stable 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. Their uniform dimensions and axial lead configuration make them especially suitable for use with automatic insertion equipment.

### Options

- Special Lead Forms
- Non-standard resistance values and tolerances
- Point matched at specified temperatures
- Tape and Reel Packaging

### Dimensions



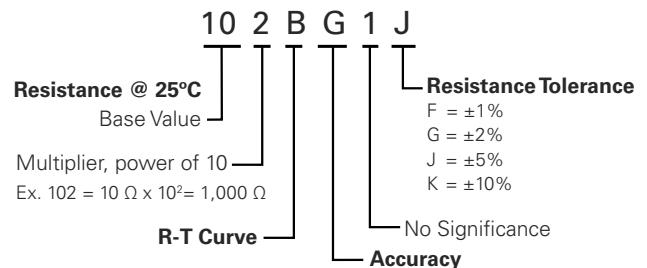
Dimensions shown in inches.

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

### Features

- High temperature capability to +300°C
- Hermetically sealed glass package
- Low cost
- Excellent long-term stability
- High Voltage Insulation
- 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.

## DO-35 Standard Series 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 | Beta (K) 25-85°C | Dissipation Constant, Nominal (mW/°C) | Thermal Time Constant, Max. - Still Air (seconds) | Thermal Time Constant, Max. - Well Stirred Oil (seconds) | Temperature Rating (°C) |
|-------------|-----------------------|-----------------------------|-----------|---------------------------------------|-----------------|------------------|---------------------------------------|---|--|-------------------------|
| 501BG1J     | 500                   | 5                           | B         | -3.31                                 | 2941            | —                | 2                                     | 5   | 0.5  | -55 to +220             |
| 501BG1K     | 500                   | 10                          | B         | -3.31                                 | 2941            | —                | 2                                     | 5   | 0.5  | -55 to +220             |
| 102BG1J     | 1000                  | 5                           | B         | -3.31                                 | 2941            | —                | 2                                     | 5   | 0.5  | -55 to +220             |
| 102BG1K     | 1000                  | 10                          | B         | -3.31                                 | 2941            | —                | 2                                     | 5   | 0.5  | -55 to +220             |
| 102EG1K     | 1000                  | 10                          | E         | -3.67                                 | 3263            | —                | 2                                     | 5   | 0.5  | -55 to +220             |
| 102PS1G     | 1000                  | 2                           | PTC       | —                                     | —               | —                | 2                                     | 8   | 1  | -55 to +150             |
| 102PS1J     | 1000                  | 5                           | PTC       | —                                     | —               | —                | 2                                     | 8   | 1  | -55 to +150             |
| 162PS1J     | 1600                  | 5                           | PTC       | —                                     | —               | —                | 2                                     | 8   | 1  | -55 to +300             |
| 182FG1K     | 1800                  | 10                          | F         | -3.86                                 | 3419            | —                | 2                                     | 5   | 0.5  | -55 to +300             |
| 202FG1J     | 2000                  | 5                           | F         | -3.86                                 | 3419            | —                | 2                                     | 5   | 0.5  | -55 to +300             |
| 202FG1K     | 2000                  | 10                          | F         | -3.86                                 | 3419            | —                | 2                                     | 5   | 0.5  | -55 to +300             |
| 202PS1J     | 2000                  | 5                           | PTC       | —                                     | —               | —                | 2                                     | 8   | 1  | -55 to +300             |
| 222E1G1K    | 2186                  | 10                          | E1        | -3.82                                 | 3320            | —                | 2                                     | 5   | 0.5  | -55 to +300             |
| 252BG1K     | 2500                  | 10                          | B         | -3.3                                  | 2941            | —                | 2                                     | 5   | 0.5  | -55 to +220             |
| 252FG1J     | 2500                  | 5                           | F         | -3.86                                 | 3419            | —                | 2                                     | 5   | 0.5  | -55 to +300             |
| 252FG1K     | 2500                  | 10                          | F         | -3.86                                 | 3419            | —                | 2                                     | 5   | 0.5  | -55 to +300             |
| 282FG1K     | 2800                  | 10                          | F         | -3.86                                 | 3419            | —                | 2                                     | 5   | 0.5  | -55 to +300             |
| 302FG1K     | 3000                  | 10                          | F         | -3.86                                 | 3419            | —                | 2                                     | 5   | 0.5  | -55 to +300             |
| 302JG1K     | 3000                  | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300             |
| 332FG1K     | 3300                  | 10                          | F         | -3.86                                 | 3419            | —                | 2                                     | 5   | 0.5  | -55 to +300             |
| 402FG4K     | 4000                  | 10                          | F13       | -3.88                                 | 3453            | 3540             | 2                                     | 5   | 0.5  | -55 to +300             |
| 502E1G1K    | 5000                  | 10                          | E1        | -3.82                                 | 3320            | —                | 2                                     | 5   | 0.5  | -55 to +300             |

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

### Specifications

| Part Number | Resistance Ohms @25°C | *Resistance Tol. ± % @ 25°C | R-T Curve | Temperature Coefficient (%/°C) @ 25°C | Beta (K) 0-50°C | Beta (K) 25-85°C | Dissipation Constant, Nominal (mW/°C) | Thermal Time Constant, Max. - Still Air (seconds) | Thermal Time Constant, Max. - Well Stirred Oil (seconds) | Temperature Range (°C) |
|-------------|-----------------------|-----------------------------|-----------|---------------------------------------|-----------------|------------------|---------------------------------------|---|--|------------------------|
| 502FG1J     | 5000                  | 5                           | F         | -3.86                                 | 3419            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 502FG1K     | 5000                  | 10                          | F         | -3.86                                 | 3419            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 502JG1K     | 5000                  | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 682JG1K     | 6800                  | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 822JG1K     | 8200                  | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 103E1G1F    | 10000                 | 1                           | E1        | —                                     | 3320            | 3435             | 2                                     | 5   | 0.5  | -55 to +250            |
| 103E1G1K    | 10000                 | 10                          | E1        | —                                     | 3320            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 103FG1K     | 10000                 | 10                          | F         | -3.86                                 | 3419            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 103GG1K     | 10000                 | 10                          | G         | -4.04                                 | 3575            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 103JG1F     | 10000                 | 1                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 103JG1G     | 10000                 | 2                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 103JG1J     | 10000                 | 5                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 103JG1K     | 10000                 | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 103JG1KE    | 10000                 | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 123GG1K     | 12000                 | 10                          | G         | -4.03                                 | 3575            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 123JG1K     | 12000                 | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 153JG1K     | 15000                 | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 203JG1F     | 20000                 | 1                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 203JG1J     | 20000                 | 5                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 203JG1K     | 20000                 | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 253JG1F     | 25000                 | 1                           | J         | —                                     | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 253JG1K     | 25000                 | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |

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

# Leaded Thermistors

## Glass Encapsulated Thermistor

### Specifications

| Part Number | Resistance Ohms @25°C | *Resistance Tol. ± % @ 25°C | R-T Curve | Temperature Coefficient (%/°C) @ 25°C | Beta (K) 0-50°C | Beta (K) 25-85°C | Dissipation Constant, Nominal (mW/°C) | Thermal Time Constant, Max. - Still Air (seconds) | Thermal Time Constant, Max. - Well Stirred Oil (seconds) | Temperature Range (°C) |
|-------------|-----------------------|-----------------------------|-----------|---------------------------------------|-----------------|------------------|---------------------------------------|---|--|------------------------|
| 303HG1K     | 30000                 | 10                          | H         | -4.29                                 | 3810            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 303JG1F     | 30000                 | 1                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 303JG1J     | 30000                 | 5                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 303JG1K     | 30000                 | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 403GG1K     | 40000                 | 10                          | G         | -3.88                                 | 3575            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 503JG1F     | 50000                 | 1                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 503JG1J     | 50000                 | 5                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 503JG1K     | 50000                 | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 683N1G1K    | 68000                 | 10                          | N1        | -4.5                                  | 3991            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 753JG1K     | 75000                 | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 104JG1F     | 100000                | 1                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 104JG1H     | 100000                | 3                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 104JG1J     | 100000                | 5                           | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 104JG1K     | 100000                | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 104LG2K     | 100000                | 10                          | L1        | -4.52                                 | 3920            | 4040             | 2                                     | 5   | 0.5  | -55 to +300            |
| 104N1G1K    | 100000                | 10                          | N1        | -4.5                                  | 3991            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 104RG1J     | 100000                | 5                           | R         | -4.68                                 | 4140            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 104RG1K     | 100000                | 10                          | R         | -4.68                                 | 4140            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 124JG1K     | 120000                | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 154JG1K     | 150000                | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 204JG1K     | 200000                | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 224JG1K     | 220000                | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |

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

### Specifications

| Part Number | Resistance Ohms @25°C | *Resistance Tol. ± % @ 25°C | R-T Curve | Temperature Coefficient (%/°C) @ 25°C | Beta (K) 0-50°C | Beta (K) 25-85°C | Dissipation Constant, Nominal (mW/°C) | Thermal Time Constant, Max. - Still Air (seconds) | Thermal Time Constant, Max. - Well Stirred Oil (seconds) | Temperature Range (°C) |
|-------------|-----------------------|-----------------------------|-----------|---------------------------------------|-----------------|------------------|---------------------------------------|---|--|------------------------|
| 234RG1G     | 230000                | 2                           | R         | -4.68                                 | 4140            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 254JG1J     | 250000                | 5                           | J         | -4.4                                  | 3892            | 3435             | 2                                     | 5   | 0.5  | -55 to +300            |
| 254JG1K     | 250000                | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 2   | 0.5  | -55 to +300            |
| 304JG1K     | 300000                | 10                          | J         | -4.4                                  | 3892            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 334RG1K     | 330000                | 10                          | R         | -4.68                                 | 4140            | 4263             | 2                                     | 5   | 0.5  | -55 to +300            |
| 504RG1J     | 500000                | 5                           | R         | -4.68                                 | 4140            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 504RG1K     | 500000                | 10                          | R         | -4.68                                 | 4140            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 105RG1J     | 1000000               | 5                           | R         | -4.68                                 | 4140            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 105RG1K     | 1000000               | 10                          | R         | -4.68                                 | 4140            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 105V3G1K    | 1000000               | 10                          | V3        | -4.68                                 | 4369            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 205RG1K     | 2000000               | 10                          | R         | -4.68                                 | 4140            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 205V4G1K    | 2000000               | 10                          | V4        | -4.85                                 | 4288            | —                | 2                                     | 5   | 0.5  | -55 to +300            |
| 375Y1G2K    | 3700000               | 10                          | Y1        | -5.33                                 | 4584            | 4800             | 2                                     | 5   | 0.5  | -55 to +300            |
| 505YG7K     | 5000000               | 10                          | Y         | -5.22                                 | 4640            | —                | 2                                     | 5   | 0.5  | -55 to +300            |

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

### Packaging

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

**Disclaimer Notice** - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at: [www.littelfuse.com/disclaimer-electronics](http://www.littelfuse.com/disclaimer-electronics)