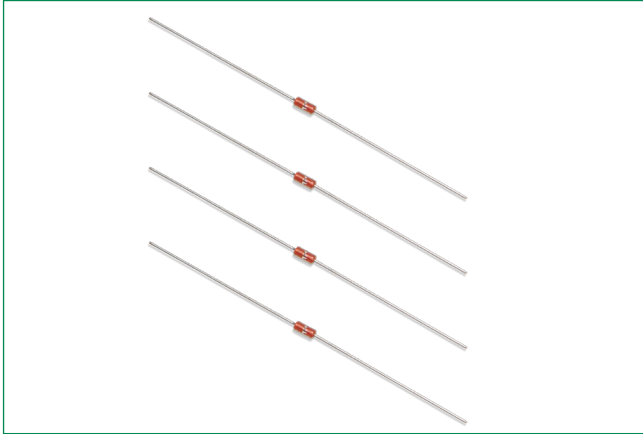


DO-35 Standard Series Glass Encapsulated Thermistors



Description

Littelfuse low cost glass encapsulated thermistors are manufactured using super stable 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. 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" 24 AWG Tinned CCS 1.0" Long Min | 0.075" Max | 0.160" 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 Range (°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 | — | — | — | — | 2 | 8 | 1 | -55 to +150 |
| 102PS1J | 1000 | 5 | — | — | — | — | 2 | 8 | 1 | -55 to +150 |
| 162PS1J | 1600 | 5 | — | — | — | — | 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 | — | — | — | — | 2 | 8 | 1 | -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 |
| 222E1G1K | 2186 | 10 | E1 | -3.82 | 3320 | — | 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 |
| 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 |

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

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| 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) |
|-------------|-----------------------|-----------------------------|-----------|---------------------------------------|-----------------|------------------|---------------------------------------|---|--|------------------------|
| 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 |
| 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 |
| 123GG1K | 12000 | 10 | G | -4.03 | 3575 | — | 2 | 5 | 0.5 | -55 to +150 |
| 123JG1K | 12000 | 10 | J | -4.4 | 3892 | — | 2 | 5 | 0.5 | -55 to +150 |
| 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 |
| 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 |

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Specifications

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|-------------|-----------------------|-----------------------------|-----------|---------------------------------------|-----------------|------------------|---------------------------------------|---|--|------------------------|
| 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 |
| 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 |
| 224JG1K | 220000 | 10 | J | -4.4 | 3892 | — | 2 | 5 | 0.5 | -55 to +300 |

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