

### LL 34 MiniMELF SM



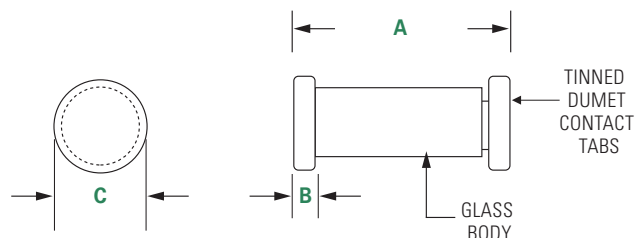
### Description

Littelfuse LL-34 “MiniMELF” style glass encapsulated surface mount thermistors are manufactured using super stable NTC chips which are hermetically sealed in a glass 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 make them especially suitable for use with automatic insertion equipment.

### Options

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

### Dimensions



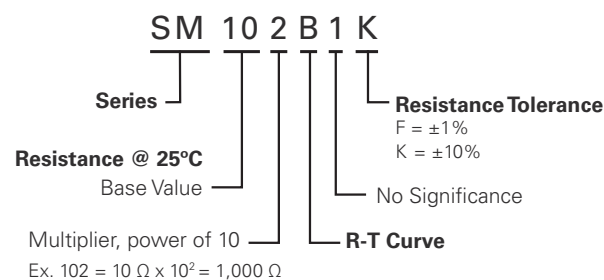
Dimensions shown in inches.

| A                  | B                  | C                  |
|--------------------|--------------------|--------------------|
| 0.135"<br>± 0.012" | 0.019"<br>± 0.005" | 0.060"<br>± 0.005" |

### Features

- High temperature capability to +220°C
- Surface mountable
- Hermetically sealed glass package
- Low cost
- Excellent long-term stability

### Part Numbering System



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

# LL 34 MiniMELF SM

## Specifications

| Part Number | Resistance Ohms @ 25°C | *Resistance Tol. $\pm$ % @ 25°C | R-T Curve | Temperature Coefficient (%/°C) @ 25°C | Beta (K) 0-50°C | Dissipation Constant, Nominal (mW/°C) | Thermal Time Constant, Max. - Still Air (seconds) | Temperature Rating (°C) |
|-------------|------------------------|---------------------------------|-----------|---------------------------------------|-----------------|---------------------------------------|---------------------------------------------------|-------------------------|
| SM102B1K    | 1000                   | 10                              | B         | -3.3                                  | 2941            | 2                                     | 8                                                 | -55 to +220             |
| SM102D1K    | 1000                   | 10                              | D2        | —                                     | 3156            | 2                                     | 8                                                 | -55 to +220             |
| SM102E1K    | 1000                   | 10                              | E         | -3.67                                 | 3263            | 2                                     | 8                                                 | -55 to +220             |
| SM202F1K    | 2000                   | 10                              | F         | -3.86                                 | 3419            | 2                                     | 8                                                 | -55 to +220             |
| SM222E1K    | 2186                   | 10                              | E1        | -3.82                                 | 3320            | 2                                     | 8                                                 | -55 to +220             |
| SM252B1K    | 2500                   | 10                              | B         | -3.31                                 | 2941            | 2                                     | 8                                                 | -55 to +220             |
| SM252B4K    | 2500                   | 10                              | B         | -3.31                                 | 2941            | 2                                     | 8                                                 | -55 to +220             |
| SM103F5K    | 10000                  | 10                              | F         | -3.86                                 | 3419            | 2                                     | 8                                                 | -55 to +220             |
| SM103G1K    | 10000                  | 10                              | G         | -4.04                                 | 3575            | 2                                     | 8                                                 | -55 to +220             |
| SM103J1F    | 10000                  | 1                               | J         | -4.4                                  | 3892            | 2                                     | 8                                                 | -55 to +220             |
| SM103J1K    | 10000                  | 10                              | J         | -4.4                                  | 3892            | 2                                     | 8                                                 | -55 to +220             |
| SM403J1K    | 10000                  | 10                              | J         | -4.4                                  | 3892            | 2                                     | 8                                                 | -55 to +220             |
| SM472F1K    | 10000                  | 10                              | F         | -3.86                                 | 3419            | 2                                     | 8                                                 | -55 to +220             |
| SM472G1K    | 10000                  | 10                              | G         | -4.03                                 | 3575            | 2                                     | 8                                                 | -55 to +220             |
| SM501B1K    | 10000                  | 10                              | B         | -3.31                                 | 2941            | 2                                     | 8                                                 | -55 to +220             |
| SM153J1K    | 15000                  | 10                              | J         | -4.4                                  | 3892            | 2                                     | 8                                                 | -55 to +220             |
| SM602F1K    | 15000                  | 10                              | F         | -3.86                                 | 3419            | 2                                     | 8                                                 | -55 to +220             |
| SM203J1K    | 20000                  | 10                              | J         | -4.4                                  | 3892            | 2                                     | 8                                                 | -55 to +220             |
| SM253J1K    | 25000                  | 10                              | J         | -4.4                                  | 3892            | 2                                     | 8                                                 | -55 to +220             |
| SM303J1K    | 30000                  | 10                              | J         | -4.4                                  | 3892            | 2                                     | 8                                                 | -55 to +220             |
| SM104J1F    | 100000                 | 1                               | J         | -4.4                                  | 3892            | 2                                     | 8                                                 | -55 to +220             |
| SM104J1K    | 100000                 | 10                              | J         | -4.4                                  | 3892            | 2                                     | 8                                                 | -55 to +220             |

\*Resistance tolerances of  $\pm$  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 | Dissipation Constant, Nominal (mW/°C) | Thermal Time Constant, Max. - Still Air (seconds) | Temperature Rating (°C) |
|-------------|------------------------|-----------------------------|-----------|-----------------------------------------|-----------------|---------------------------------------|---------------------------------------------------|-------------------------|
| SM104J1O    | 100000                 | —                           | J         | -4.4                                    | 3892            | 2                                     | 8                                                 | -55 to +220             |
| SM104R1K    | 100000                 | 10                          | R         | -4.68                                   | 4140            | 2                                     | 8                                                 | -55 to +220             |
| SM502F1K    | 100000                 | 10                          | F         | -3.86                                   | 3419            | 2                                     | 8                                                 | -55 to +220             |
| SM503J1K    | 100000                 | 10                          | J         | -4.4                                    | 3892            | 2                                     | 8                                                 | -55 to +220             |
| SM504R1K    | 100000                 | 10                          | R         | -4.68                                   | 4140            | 2                                     | 8                                                 | -55 to +220             |
| SM254R1K    | 250000                 | 10                          | R         | -4.68                                   | 4140            | 2                                     | 8                                                 | -55 to +220             |
| SM105V3K    | 1000000                | 10                          | V3        | -4.93                                   | 4369            | 2                                     | 8                                                 | -55 to +220             |
| SM105R1K    | 1000000                | 10                          | R         | -4.68                                   | 4140            | 2                                     | 8                                                 | -55 to +220             |

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

### Packaging

| Packaging Option | Packaging Code | Standard Quantity | Standard |
|------------------|----------------|-------------------|----------|
| Tape and Reel    | -TR            | 2500              | EIA-481  |

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