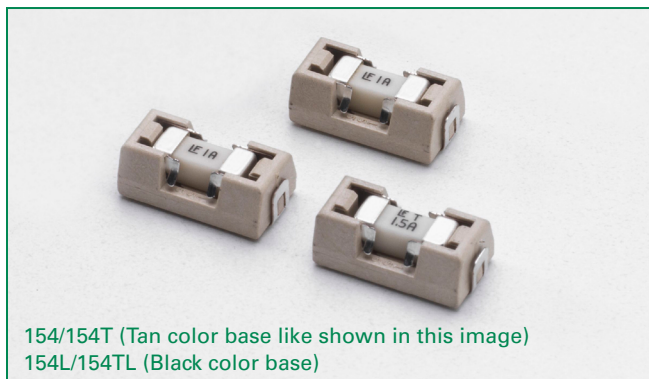


### 154/154T/154L/154TL Series OMNI-BLOK® Fuse and Holder Assembly



#### Agency Approvals

Recognized under the Components Program of Underwriters Laboratories and Certified by CSA. Approved by METI from 1 through 5 amperes.

| Agency                                                                            | Agency File Number                                          | Ampere Range                                                                                            |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
|  | E14721                                                      | 154 Fast-Acting: 0.062A - 10A<br>154 Time-Lag: 0.375A - 7A                                              |
|  | NBK030205-E10480A<br>NBK030205-E10480B<br>NBK101105-E184655 | 154 Fast-Acting: 1A<br>154 Fast-Acting: 1A - 5A<br>154 Time-Lag: 1A - 5A<br>154 Fast-Acting: 6.3A - 10A |

#### Description

The RoHS compliant 154 Series OMNI-BLOK® offers a solution for efficient installation and easy replacement of miniature Nano<sup>2</sup>® surface mount fuses.

Offered in a tape and reel package, this fuse and holder combination can be installed on a PC board as an efficient single step. Fuse replacement can be accomplished without exposing the PC board to the detrimental effects of solder heat.

The fuse holder unit may be sold as a stand-alone item, shipped in bulk quantity (not pre-packaged in tape and reel cartridges) using part number 01550900. Please contact Littelfuse for additional information.

#### Features

- Easy fuse replacement
- Miniature size
- RoHS compliant and Halogen Free
- Very Fast-Acting and Time-Lag options available
- Holder sized to fit a range of Nano<sup>2</sup>® type fuses
- Low fuse temperature de-rating
- Wide range of current rating available
  - Fast-Acting: 62mA - 10A
  - Time-Lag: 375mA - 5A
- Wide operating temperature range
- Heat-resistant fuseholder, UL94 V-0
- 260°C reflow capable fuseholder

#### Ordering Information

##### With Very Fast-Acting Fuse Installed

| Catalog Number | Ampere Rating (A) | Amp Code | Fuse Furnished* |
|----------------|-------------------|----------|-----------------|
| 0154.062       | 0.062             | .062     | 0451.062        |
| 0154.080       | 0.08              | .080     | 0451.080        |
| 0154.100       | 0.1               | .100     | 0451.100        |
| 0154.125       | 0.125             | .125     | 0451.125        |
| 0154.160       | 0.16              | .160     | 0453.160        |
| 0154.200       | 0.2               | .200     | 0453.200        |
| 0154.250       | 0.25              | .250     | 0453.250        |
| 0154.315       | 0.315             | .315     | 0453.315        |
| 0154.375       | 0.375             | .375     | 0453.375        |
| 0154.400       | 0.4               | .400     | 0453.400        |
| 0154.500       | 0.5               | .500     | 0453.500        |
| 0154.630       | 0.63              | .630     | 0453.630        |
| 0154.750       | 0.75              | .750     | 0453.750        |
| 0154.800       | 0.8               | .800     | 0453.800        |
| 0154001.       | 1                 | 001.     | 0453001.        |
| 01541.25       | 1.25              | 1.25     | 04531.25        |
| 015401.5       | 1.5               | 01.5     | 045301.5        |
| 015401.6       | 1.6               | 01.6     | 045301.6        |
| 0154002.       | 2                 | 002.     | 0453002.        |
| 015402.5       | 2.5               | 02.5     | 045302.5        |
| 0154003.       | 3                 | 003.     | 0453003.        |
| 01543.15       | 3.15              | 3.15     | 04533.15        |
| 015403.5       | 3.5               | 03.5     | 045303.5        |
| 0154004.       | 4                 | 004.     | 0453004.        |
| 0154005.       | 5                 | 005.     | 0453005.        |
| 015406.3       | 6.3               | 06.3     | 045306.3        |
| 0154007.       | 7                 | 007.     | 0453007.        |
| 0154008.       | 8                 | 008.     | 0453008.        |
| 0154010.       | 10                | 010.     | 0453010.        |

##### With Time-Lag (Slo-Blo®) Fuse Installed

| Catalog Number | Ampere Rating (A) | Amp Code | Fuse Furnished* |
|----------------|-------------------|----------|-----------------|
| 154.375 T      | 0.375             | .375     | 0454.375        |
| 154.500 T      | 0.5               | .500     | 0454.500        |
| 154.750 T      | 0.75              | .750     | 0454.750        |
| 154001. T      | 1                 | 001.     | 0454001.        |
| 15401.5 T      | 1.5               | 01.5     | 045401.5        |
| 154002. T      | 2                 | 002.     | 0454002.        |
| 15402.5 T      | 2.5               | 02.5     | 045402.5        |
| 154003. T      | 3                 | 003.     | 0454003.        |
| 15403.5 T      | 3.5               | 03.5     | 045403.5        |
| 154004. T      | 4                 | 004.     | 0454004.        |
| 154005. T      | 5                 | 005.     | 0454005.        |
| 154007. T      | 7                 | 007.     | 0454007.        |

\* The 453 and 454 Series fuses identified above have silver-plated end caps, designed to accommodate solder reflow processes:

For 453 Series fuse replacement, either 451, 453 or 448 Series may be used.

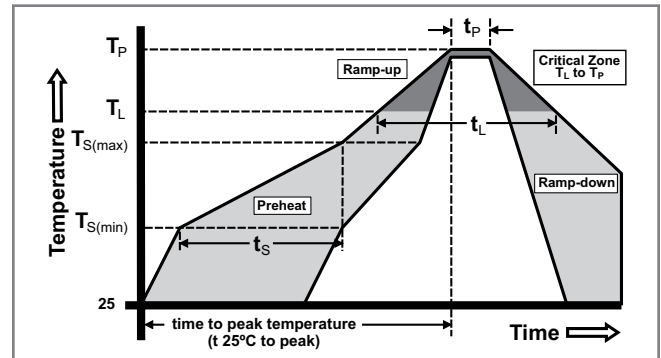
For 454 Series fuse replacement, either 452, 454 or 449 Series may be used.

For detailed operating characteristic and performance information for each of the fuse series mentioned above, please refer to their respective data available online at [www.littelfuse.com](http://www.littelfuse.com).

\*\* 01550900 is UR approved and rated 125V, 10A.

### Soldering Parameters

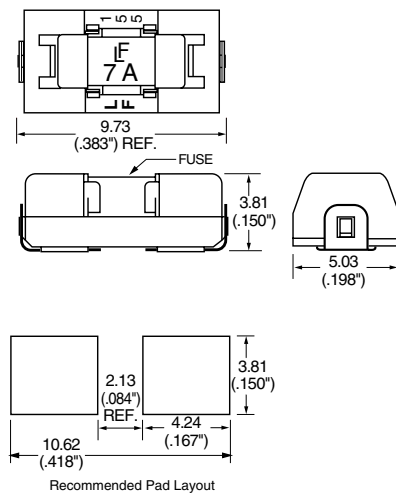
|                                                        |                                    |                         |
|--------------------------------------------------------|------------------------------------|-------------------------|
| Reflow Condition                                       |                                    | Pb – Free assembly      |
| Pre Heat                                               | - Temperature Min ( $T_{s(min)}$ ) | 150°C                   |
|                                                        | - Temperature Max ( $T_{s(max)}$ ) | 200°C                   |
|                                                        | - Time (Min to Max) ( $t_s$ )      | 60 – 120 seconds        |
| Average Ramp-up Rate (Liquidus Temp ( $T_L$ ) to peak) |                                    | 5°C/second max.         |
| $T_{s(max)}$ to $T_L$ - Ramp-up Rate                   |                                    | 5°C/second max.         |
| Reflow                                                 | - Temperature ( $T_L$ ) (Liquidus) | 217°C                   |
|                                                        | - Temperature ( $t_L$ )            | 60 – 90 seconds         |
| Peak Temperature ( $T_P$ )                             |                                    | 260 <sup>+0/-5</sup> °C |
| Time within 5°C of actual peak Temperature ( $t_P$ )   |                                    | 20 – 40 seconds         |
| Ramp-down Rate                                         |                                    | 5°C/second max.         |
| Time 25°C to peak Temperature ( $T_P$ )                |                                    | 8 minutes max.          |
| Do not exceed                                          |                                    | 260°C                   |



### Product Characteristics

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -55°C to 125°C |
|-----------------------|----------------|

### Dimensions



### Part Numbering System

|                       |      |
|-----------------------|------|
| <b>SERIES</b>         | 0154 |
| <b>AMP Code</b>       | 001. |
| <b>QUANTITY Code</b>  | D    |
| <b>PACKAGING Code</b> | R    |
| <b>TYPE Code</b>      | T    |
| <b>L</b>              | L    |

Refer to Ordering information section on previous page.

D = 1500 pcs

R = Tape and Reel

T = Time-Lag (Slo-Blo®)

**"L" suffix for Black Color Holder**

**"G" suffix for 451L and 452L Fuses (Au-Plated Caps)**

**Example:**  
1.5 amp Fast-acting product is 0154**01.5**DR.  
1.5 amp Time-lag product is 0154**01.5**DRT.  
(1 amp product shown above).

### Packaging

| Packaging Option | Packaging Specification        | Quantity | Quantity & Packaging Code |
|------------------|--------------------------------|----------|---------------------------|
| Reel Pack        | EIA RS-481-2 (IEC 286, part 3) | 1500     | DR                        |

### Additional Information



Datasheet



Resources



Samples