

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





Description

The RoHS compliant 154 Series OMNI-BLOK® Fuse and Holder Assembly offers a solution for efficient installation and easy replacement of miniature Nano²® 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 155900. Please contact Littelfuse for additional information.

Agency Approvals

| Agency | Agency File Number | Ampere Range |
|---|--------------------|--|
|  | E14721 | 154 Fast-Acting Fuse: 0.062A - 10A 154 Slo-Blo® Fuse: 0.375A - 7A |
|  | NBK030205-E10480A | 154 Fast-Acting Fuse: 1A - 1.6A |
| | NBK030205-E10480B | 154 Fast-Acting Fuse: 2A - 5A |
| | NBK101105-E184655 | 154 Fast-Acting Fuse: 6.3A - 10A |
| | NBK030205-E10480B | 154 Slo-Blo® Fuse: 1A - 5A |

Features

- Easy fuse replacement rating available
- Miniature size - Fast-Acting Fuses: 62mA - 10A
- RoHS compliant and Halogen Free - Slo-Blo Fuses: 375mA - 5A
- Very Fast-Acting and Time-Lag options available
- Holder sized to fit a range of Nano²® type fuses
- Low fuse temperature re-rating
- Wide range of current
- 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 | 0453.062 |
| 0154.080 | 0.08 | .080 | 0453.080 |
| 0154.100 | 0.1 | .100 | 0453.100 |
| 0154.125 | 0.125 | .125 | 0453.125 |
| 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 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.

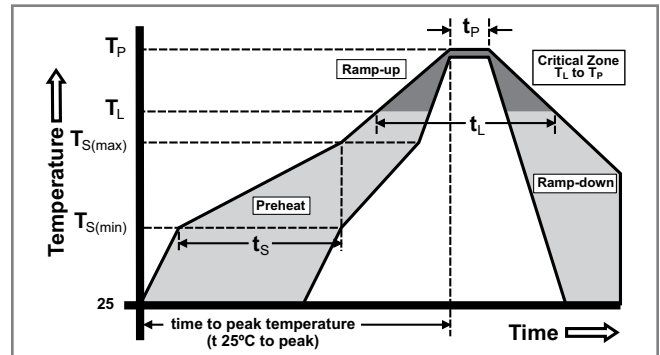
For 454 Series fuse replacement, either 452, 454 or 449 Series may be used.

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.

** 155900 is UR recognized 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 ^{+0/-5} °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

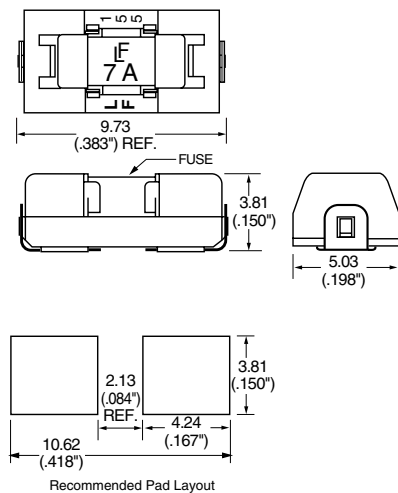
| | |
|-----------------------|----------------|
| Operating Temperature | -55°C to 125°C |
|-----------------------|----------------|

Part Numbering System

0154 001. D R T L

| | | | | | | |
|---|--|------|---|---|---|---|
| SERIES | 0154 | 001. | D | R | T | L |
| AMP Code | Refer to Ordering information section on previous page. | | | | | |
| QUANTITY Code | D = 1500 pcs | | | | | |
| PACKAGING Code | R = Tape and Reel | | | | | |
| TYPE Code | T = Time-Lag (Slo-Blo®) | | | | | |
| "L" suffix for Black Color Holder | Example: 1.5 amp Fast-acting product is 0154 01.5 DR. | | | | | |
| "G" suffix for 451L (Au-Plated Caps) | 1.5 amp Time-lag product is 0154 01.5 DRT. | | | | | |
| | (1 amp product shown above). | | | | | |

Dimensions



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

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.