# **Surface Mount Fuses**

NANO2® > 154 OMNI-BLOK® Fuse and Holder Combination

# 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 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 using part number 01550900M and also pre-packaged in tape and reel cartridges using part number 01550900DR.

#### **Agency Approvals**

Agency	Agency File Number	Ampere Range
c <b>PU</b> °us	E14721	0.062A - 10A+ 0.375A - 7A++
PS E	NBK030205-E10480A NBK030205-E10480B NBK101105-E184655 NBK030205-E10480B	1A - 1.6A* 2A - 5A+ 16.3A - 10A+ 1A - 5A++

<sup>+</sup> Fast-acting Fuse ++ Slo-Blo(R) Fuse

#### **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
- Wide range of current ratings available
  - Fast-Acting Fuses: 62mA - 10A
- Slo-Blo Fuses: 375mA -

- Wide operating temperature range
- Heat-resistant fuseholder, UL94 V-0
- 260°C reflow capable fuseholder
- Recognized to UL/CSA/ NMX 248-1, UL/CSA/ NMX 248-14 and UL/CSA/ NMX 4248-1.

#### **Ordering Information**

### With Very Fast-Acting Fuse Installed

Catalog Number	Ampere Rating (A)	Amp Code	Fuse Furnished <sup>*</sup>
154.062	0.062	0.062	453.062
154.08	0.08	0.08	453.08
154.1	0.1	0.1	453.1
154.125	0.125	0.125	453.125
154.16	0.16	0.16	453.16
154.2	0.2	0.2	453.2
154.25	0.25	0.25	453.25
154.315	0.315	0.315	453.315
154.375	0.375	0.375	453.375
154.4	0.4	0.4	453.4
154.5	0.5	0.5	453.5
154.63	0.63	0.63	453.63
154.75	0.75	0.75	453.75
154.8	0.8	0.8	453.8
154001.0	1	1.0	453001.0
1541.25	1.25	1.25	4531.25
15401.5	1.5	1.5	45301.5
15401.6	1.6	1.6	45301.6
154002.0	2	2.0	453002.0
15402.5	2.5	2.5	45302.5
154003.0	3	3.0	453003.0
1543.15	3.15	3.15	4533.15
15403.5	3.5	3.5	45303.5
154004.0	4	4.0	453004.0
154005.0	5	5.0	453005.0
15406.3	6.3	06.3	45306.3
154007.0	7	7.0	453007.0
154008.0	8	8.0	453008.0
154010.0	10	10.0	453010.0

### With Slo-Blo® Fuse Installed

Catalog Number	Ampere Rating (A)	Amp Code	Fuse Furnished*
154.375 T	0.375	0.375	454.375
154.5 T	0.5	0.5	454.5
154.75 T	0.75	0.75	454.75
154001.0 T	1	1.0	454001.0
15401.5 T	1.5	1.5	45401.5
154002.0 T	2	2.0	454002.0
15402.5 T	2.5	2.5	45402.5
154003.0 T	3	3.0	454003.0
15403.5 T	3.5	3.5	45403.5
154004.0 T	4	4.0	454004.0
154005.0 T	5	5.0	454005.0
154007.0 T	7	7.0	454007.0

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

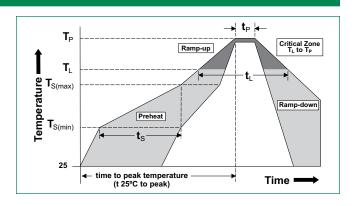
For 453 Series fuse replacement, either 451, 453 or 448 Series may be used

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 UL Recognized for the US and Canadian market. It is rated 125V, 10A

#### **Soldering Parameters**

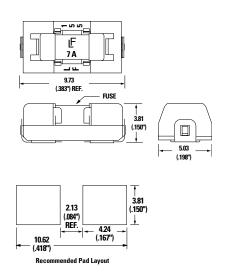
Reflow Condition		Pb – Free assembly	
Pre Heat	-Temperature Min (T <sub>s(min)</sub> )	150°C	
	-Temperature Max (T <sub>s(max)</sub> )	200°C	
	-Time (Min to Max) (t <sub>s</sub> )	60 - 180 seconds	
Average Ramp-up Rate (Liquidus Temp (T <sub>L</sub> ) to peak)		5°C/second max.	
T <sub>S(max)</sub> to T <sub>L</sub> -	Ramp-up Rate	5°C/second max.	
Reflow	- Temperature (T <sub>L</sub> ) (Liquidus)	217°C	
Retiow	- Temperature (t <sub>L</sub> )	60 - 150 seconds	
Peak Temperature (T <sub>p</sub> )		260 <sup>+0/–5</sup> °C	
Time within	5°C of actual peak Temperature (t <sub>p</sub> )	20 - 40 seconds	
Ramp-down Rate		5°C/second max.	
Time 25°C to peak Temperature (T <sub>p</sub> )		8 minutes max.	
Do not exceed		260°C	



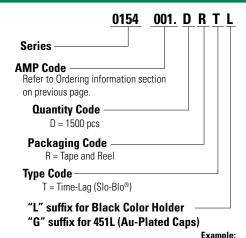
# **Product Characteristics**

Operating Temperature -55°C to 125°C

## **Dimensions**



# **Part Numbering System**



**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 60286-3, part 3)	1500	DR

#### **Additional Information**





