# **Surface Mount Fuses**

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

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





### **Agency Approvals**

Agency	Agency File Number	Ampere Range
c <b>W</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

### **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 fuse's. 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.

### **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 -5A

- 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	Amp	Fuse	
	(A)	Code	Furnished*	
0154.062	0.062	0.062	0453.062	
0154.080	0.08	0.080	0453.080	
0154.100	0.1	0.100	0453.100	
0154.125	0.125	0.125	0453.125	
0154.160	0.16	0.160	0453.160	
0154.200	0.2	0.200	0453.200	
0154.250	0.25	0.250	0453.250	
0154.315	0.315	0.315	0453.315	
0154.375	0.375	0.375	0453.375	
0154.400	0.4	0.400	0453.400	
0154.500	0.5	0.500	0453.500	
0154.630	0.63	0.630	0453.630	
0154.750	0.75	0.750	0453.750	
0154.800	0.8	0.800	0453.800	
0154001.	1	001.0	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	002.0	0453002.	
015402.5	2.5	02.5	045302.5	
0154003.	3	003.0	0453003.	
01543.15	3.15	3.15	04533.15	
015403.5	3.5	03.5	045303.5	
0154004.	4	004.0	0453004.	
0154005.	5	005.0	0453005.	
015406.3	6.3	06.3	045306.3	
0154007.	7	007.0	0453007.	
0154008.	8	0.800	0453008.	
0154010.	10	010.0	0453010.	

### With Slo-Blo® Fuse Installed

Catalog Number	Ampere Rating (A)	Amp Code	Fuse Furnished*
154.375 T	0.375	0.375	0454.375
154.500 T	0.5	0.500	0454.500
154.750 T	0.75	0.750	0454.750
154001. T	1	001.0	0454001.
15401.5 T	1.5	01.5	045401.5
154002. T	2	002.0	0454002.
15402.5 T	2.5	02.5	045402.5
154003. T	3	003.0	0454003.
15403.5 T	3.5	03.5	045403.5
154004. T	4	004.0	0454004.
154005. T	5	005.0	0454005.
154007. T	7	007.0	0454007.

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

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

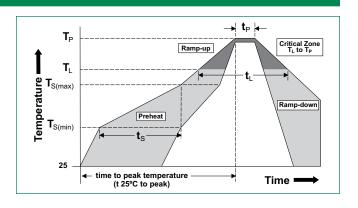
For 454 Series fuse replacement, either 452, 454 or 449 Series may be used.

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.

## **Surface Mount Fuses**

### **Soldering Parameters**

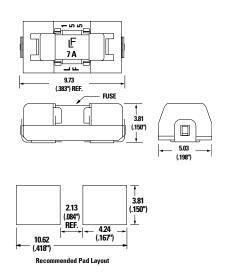
Reflow Condition		Pb – Free assembly
Pre Heat	-Temperature Min (T <sub>s(min)</sub> )	150°C
	-Temperature Max (T <sub>s(max)</sub> )	200°C
	-Time (Min to Max) (t <sub>s</sub> )	60 - 180 seconds
Average Ramp-up Rate (Liquidus Temp (T <sub>L</sub> ) to peak)		5°C/second max.
T <sub>S(max)</sub> to T <sub>L</sub> - Ramp-up Rate		5°C/second max.
Reflow	- Temperature (T <sub>L</sub> ) (Liquidus)	217°C
	- 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 exce	ed	260°C



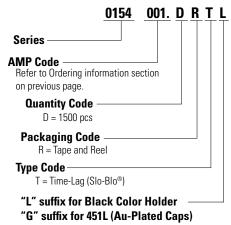
### **Product Characteristics**

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

### **Dimensions**



### **Part Numbering System**



**Example:** 1.5 amp Fast-acting product is 0154<u>**01.5</u>DR**.</u>

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**





