

Properties	Applications
<ul style="list-style-type: none"> * Lead free, RoHS conformity * Halogen free * very fast acting * high operating temperature * robust ceramic glass construction * excellent environmental integrity 	<ul style="list-style-type: none"> * semiconductor protection * application with low power consumption * medical equipment * secondary AC/DC protection * EL inverter * automation systems



Article no.	Irat A	Voltage drop 1,0 x Irat max. mV	Power dissipation 1,0 x Irat nominal W	Melting Integral 10 x Irat nominal A²s	Breaking capacity	US	Marking
F520 0250	0,250	1450	0,26	0,00028	125V AC / DC	*	.25
F520 0375	0,375	740	0,23	0,0027			E
F520 0500	0,500	670	0,29	0,0022	50 A AC / DC	*	.5
F520 0750	0,750	635	0,33	0,0040			.75
F520 1100	1,000	210	0,35	0,0180			1
F520 1125	1,250	190	0,36	0,0280			J
F520 1150	1,500	180	0,36	0,0400			1.5
F520 1300	3,000	110	0,40	0,120		*	3

* pending

Marking of the parts is located on the ceramic side. Fuses have to be assembled with this side facing up.

Permissible continuous operating current is ≤ 80 % at ambient temperature of 23 °C (73.4 °F).

Limits for Pre-arcing Time

Rated Current	1,0 x Irat	2,5 x Irat		
500mA ... 800mA	> 4h	< 5s		

Soldering process parameters

Wave soldering		Reflow soldering	
Preheat temperature:	100°C - 160°C	Preheat temperature:	140°C - 165°C
Preheat time:	60 - 180s	Preheat time:	90 - 120s
Solder temperature	260°C max.	Peak temperature:	260°C max.
Dwell time:	5s	Soldering time > 200°C:	30s

Product characteristics

Base / Cap:	Ceramic substrate / Glass cover	Operating temperature:	-55°C - 125°C
Termination:	Sn-plating on Ni flash	Vibration resistance:	MIL-STD-202, Method 204, Condition C
Solderability:	245°C < 3s ANSI/J-STD-002 Test B	Thermal shock:	-65°C - 125°C, MIL-STD-202, Method 107, Test B
Soldering heat resistance	260°C 10s (wave) acc. to IEC 60068-2-58	Stock conditions:	+10°C - 60°C RH <75%
	380°C 3s (soldering iron)		

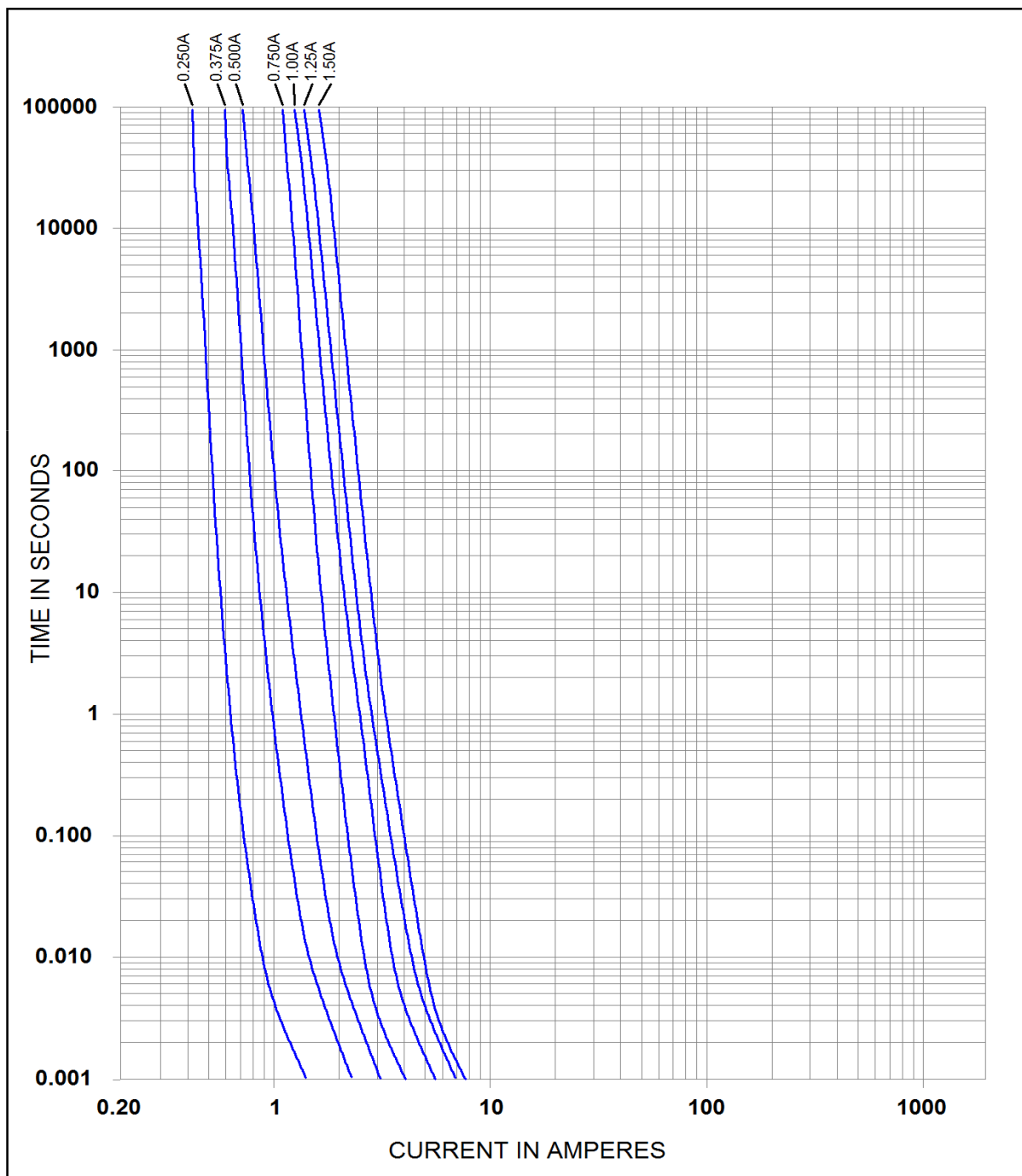


Average time-current (I-t) curves



520XXXX Series

Fast-Acting Fuse UL248-14



Specifications are subject to change without notice.

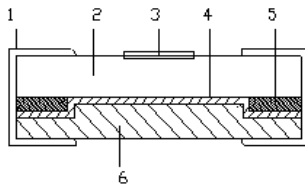
Note: 1.00 means the number one with two decimal places.

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Inter Control Hermann Köhler Elektrik GmbH & Co. KG Nürnberg/Germany - Tel. +49(0)176-10574894 - Fax +49(0)911/9522702
E-Mail: simic.nebojsa@intercontrol.de - Website: www.intercontrol.com

Dimensions and recommended PCB layout

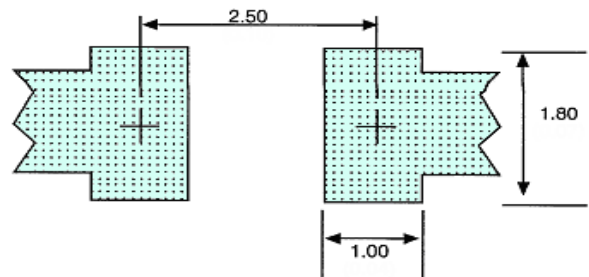
Construction (not to scale):



1. Termination: Sn plating on Ni flash
2. Ceramic substrate
3. Marking of the rated current
4. Fusible element
5. Silver termination pad
6. Glass cover

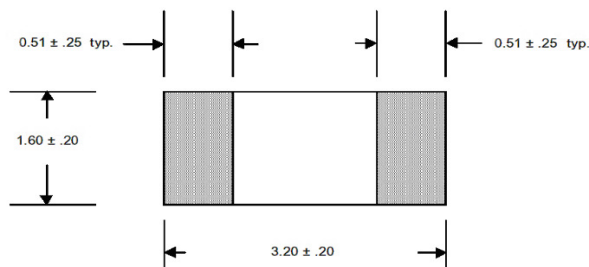
Recommended pad layout:

All dimensions in mm:

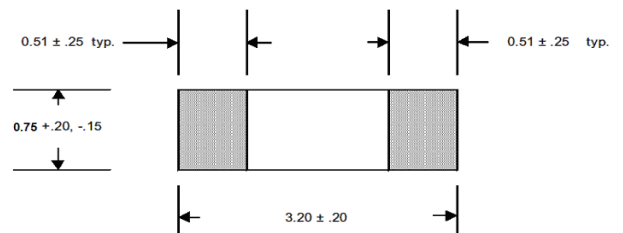


Dimensions of the fuse:

Top view in mm:



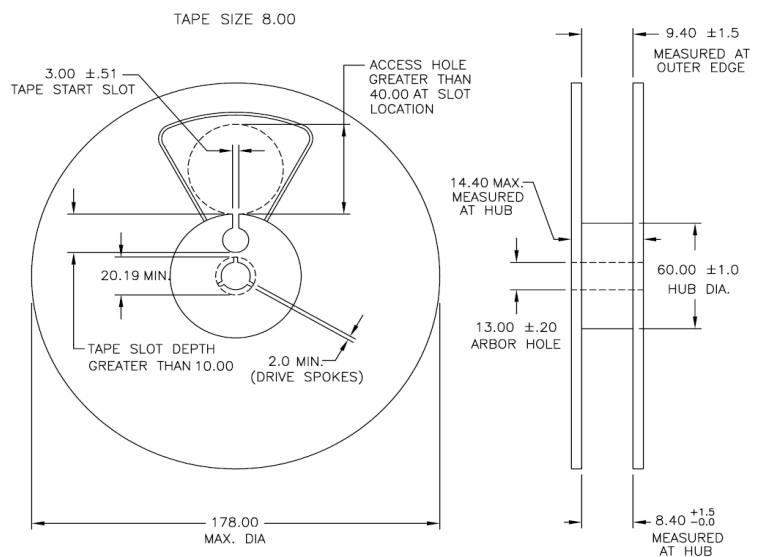
Side view in mm:



Packaging / Dimensions / Quantities per package unit

Tape and reel: 3000 pcs on 8mm tape on a 178mm reel per EIA Standard 481

Reel dimensions in mm:



Ordering information

F52X NNNN

X = 3: tape-and-reel (blister)

NNNN = Rated current regarding article table

Irat	amperecode
250 mA	0250
375 mA	0375
500 mA	0500
750 mA	0750
1 A	1100
1,25 A	1125
1,5 A	1150
3 A	1300

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