



Properties	Applications
<ul style="list-style-type: none"> <li>* Lead free, RoHS conformity</li> <li>* Halogen free</li> <li>* Current inrush pulse stability</li> <li>* improved internal resistance</li> <li>* variable I-t-characteristic</li> <li>* low voltage drop</li> </ul>	<ul style="list-style-type: none"> <li>* Household appliances</li> <li>* Electronic ballast</li> <li>* Chargers / power supplies</li> <li>* Consumer electronics</li> <li>* Industrial controllers</li> <li>* Heating system components</li> </ul>

**No-flame by EN60335-1**



Article no.	Irat A	Voltage drop 1,0 x Irat max. (mV)	Power dissipation 1,5 x Irat max. (W)	Melting Integral 10 x Irat nominal A²s	Breaking capacity	Advanced properties	
F1X0 0050	0,050				65V AC / DC 50A cos phi = 1,0	Resistance up to 10 Ohm Fast acting 10 x Irat / < 1ms Improved surge resistance	
F1X0 0063	0,063						
F1X0 0080	0,080						
F1X0 0100	0,100						
F1X0 0125	0,125						
F1X0 0160	0,160		customized		125V AC / DC 35 - 50A cos phi = 1,0	low voltage drop Resistance up to 1 Ohm	
F1X0 0200	0,200						
F1X0 0250	0,250						
F1X0 0315	0,315						
F1X0 0400	0,400						
F1X0 0500	0,500		specification		250V AC 20A cos phi = 1,0	Improved surge resistance IEC 61000-4-5 level 1kV up to 4kV	
F1X0 0630	0,630						
F1X0 0800	0,800						
F1X0 1100	1,000						
F1X0 1125	1,250						
F1X0 1160	1,600						
F1X0 1200	2,000						
F1X0 1250	2,500						
F1X0 1315	3,150						
F1X0 1400	4,000						
F1X0 1500	5,000						
F1X0 1630	6,300						

Permissible continuous operating current is ≤ 100 % at ambient temperature of 23 °C (73.4 °F).

**Limits for Pre-arcing Time**

Rated Current	1.5 x Irat	2 x Irat	3 x Irat	10 x Irat
50mA ... 6,3A	> 1h	<1... 120s	< 0,1 ... 30s	< 0,5 ... 200ms

**Soldering process parameters**

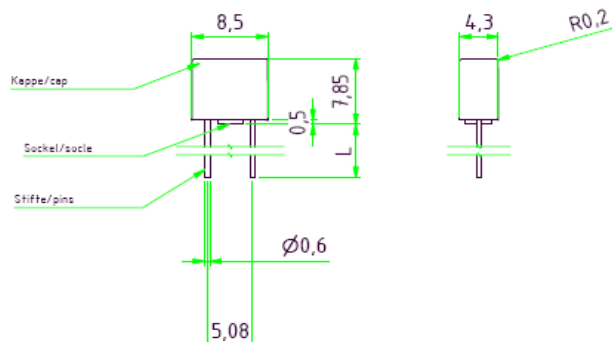
Wave soldering		Reflow soldering	
Preheat temperature:	100°C - 160°C	Preheat temperature:	140°C - 165°C
Preheat time:	60 - 180s	Preheat time:	90 - 120s
Solder temperature	265°C max.	Peak temperature:	255°C max.
Dwell time:	5 - 10s	Soldering time > 200°C:	30s

**Product characteristics**

Base / Cap	Polyamid PA 66 UL94-V0	Operating temperature:	-40°C - 125°C
Lead	Copper tin plated; pull strength 10N max.	Vibration resistance	acc. to IEC 60068-2-6
Solderability	245°C < 3s	Stock conditions:	+10°C - 60°C RH <75%
Soldering heat resistance	260°C 10s (wave) acc. to IEC 60068-2-20 350°C 5s (soldering iron)	Glow wire test:	acc. to IEC 60335-1 requirements IEC 60695-2-12, IEC 60695-2-13

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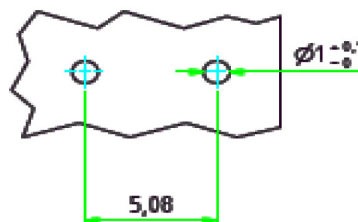
## Dimensions and recommended PCB layout



Irat / A	Track sizes (crosssection)
0,05 - 5	min. 0,1mm <sup>2</sup>
6,3	min. 0,2mm <sup>2</sup> or 35µm with min. 5mm width

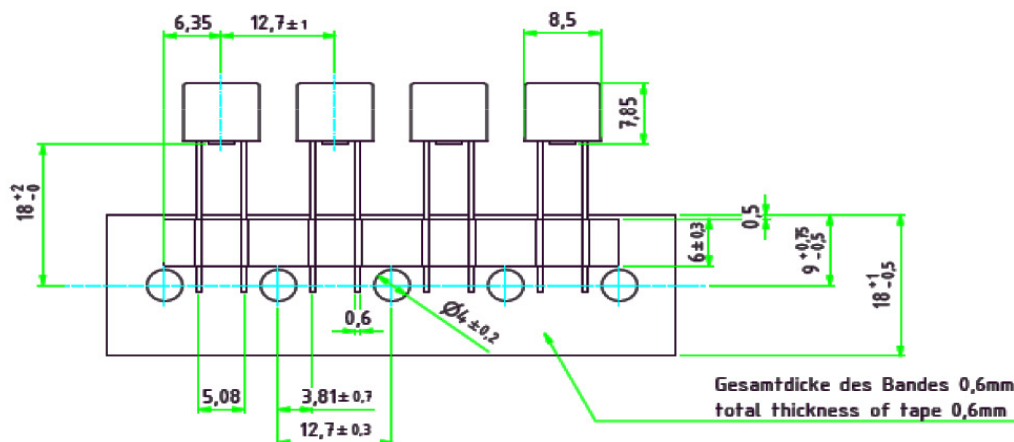
weight: < 0,6g

reommended drill layout for PCB



## Packaging / Dimensions / Quantities per package unit

In bulk:	1000 pcs per box
Pin length "L"	4,3 mm (variable 2,5 ... 4,3mm)
On tape	1400 pcs per Ammo pack EIA 468-A, IEC 286-2
Pin length "L"	20,00 mm
Pin in Paste	on request
Pin length "L"	2,1 mm



## Ordering information

**F1XY NNNN**

Y = 1: Ammo Pack  
 2: Bulk  
 3: reflow version  
 X = I-t-characteristic  
 NNNN = Rated current regarding article table

Irat	amperecode
50 mA	0050
63 mA	0063
80 mA	0080
100mA	0100
125 mA	0125
160 mA	0160
200 mA	0200
250 mA	0250
315 mA	0315
400 mA	0400
500 mA	0500
630 mA	0630
800 mA	0800
1 A	1100
1,25 A	1125
1,6 A	1160
2 A	1200
2,5 A	1250
3,15 A	1315
4 A	1400
5 A	1500
6,3 A	1630

Different rated currents beside the standard values e.g. 415mA etc. are available.  
 Please ask for protectors designed for high inrush currents, special breaking capacity, internal enhanced resistance, special I-t-curves.