

## FEATURES

- **Miniature ceramic cartridge**
- **FF Speed rated – very fast acting**
- **5mm x 20mm cartridge size**
- **Very high interrupting rating**
- **High rated voltages  
Cylindrical shape**

## RS PRO, 500mA Ceramic Cartridge Fuse, 5 x 20mm, Speed FF

RS Stock No.: 420-066



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

RS PRO range of miniature ceramic cartridge fuses which are ultra-rapid (FF) that operate at higher temperatures so are ideal to provide circuit protection to semiconductor devices. They are ideal for providing protection to devices or internal circuits from short circuits and overcurrent. They are deliberately weaker components which, when too much current is drawn, will blow. Once the fuse has blown it will need replacing in order to make the circuit complete and allow the flow of current.

## General Specifications

<b>Fuse Speed</b>	FF
<b>Body Material</b>	Ceramic
<b>Size Designation</b>	Miniature
<b>UL Class</b>	UL 248-13
<b>Applications</b>	Industrial, Commercial, Home/Residential, Automotive

## Electrical Specifications

<b>Current Rating</b>	500mA
<b>Voltage Rating</b>	250V ac
<b>Breaking Capacity (at Maximum Voltage Rating)</b>	300kV bei/at, , 250V ac , $\cos\phi < 0.2$
<b>Voltage Drop</b>	5500mV
<b>Power Dissipation</b>	0.3W
<b>I<sup>2</sup>t Value</b>	0.07A <sup>2</sup> s

## Mechanical Specifications

<b>Fuse Size</b>	5mm x 20mm
<b>Overall Length</b>	20mm
<b>Diameter</b>	5mm

## Approvals

Compliance/Certifications	UL, RoHS
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Bemessungsstrom Rated current mA / A	Spannungsfall Voltage drop mV	Verlustleistung Power loss bei/at 1 x I <sub>rat</sub> [W]	Schaltvermögen Breaking capacity kA	I <sup>2</sup> t <sub>s</sub> -Wert I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	I <sup>2</sup> t <sub>a</sub> -Wert I <sup>2</sup> t <sub>a</sub> -value bei/at U <sub>rat</sub> [A <sup>2</sup> s]
125 mA	3500	0,5	 300 kA bei/at 250 V AC cos φ < 0,2	0,0024	0,0034
160 mA	1300	0,3		0,004	0,0056
200 mA	600	0,2		0,01	0,011
250 mA	550	0,2		0,02	0,027
315 mA	500	0,2		0,04	0,042
400 mA	500	0,2		0,07	0,084
500 mA	550	0,3		0,07	0,091
630 mA	600	0,4		0,15	0,24
800 mA	600	0,5		0,32	0,42
1 A	600	0,6		0,32	0,45
1,25 A	400	0,5		0,20	0,28
1,6 A	400	0,7		0,31	0,51
2 A	400	0,8		0,64	1,0
2,5 A	400	1,0		0,88	1,5
3,15 A	400	1,3		1,6	2,7
4 A	350	1,4		3,2	5,4
5 A	350	1,8		5,9	10
6,3 A	250	2,8		1,6	4,8
8 A	230	3,0	4,5	14	
10 A	180	3,2	8,8	26	
12,5 A	150	4,0	15	44	

### Grenzwerte der Schmelzeit:

Pre-arcing time limits:

Range	1 x I <sub>rat</sub>	2 x I <sub>rat</sub>	2,75 x I <sub>rat</sub>	4 x I <sub>rat</sub>	10 x I <sub>rat</sub>
125 - 800 mA	min. 1 h	-	-	max. 60 ms	max. 6 ms
1 - 5 A		max. 1 s	4 - 100 ms	1 - 25 ms	max. 3 ms
Range	1,2 x I <sub>rat</sub>	1,5 x I <sub>rat</sub>	2,75 x I <sub>rat</sub>	4 x I <sub>rat</sub>	10 x I <sub>rat</sub>
6,3 - 12,5 A	min. 1 h	max. 30 min	4 - 300 ms	1 - 30 ms	max. 1 ms