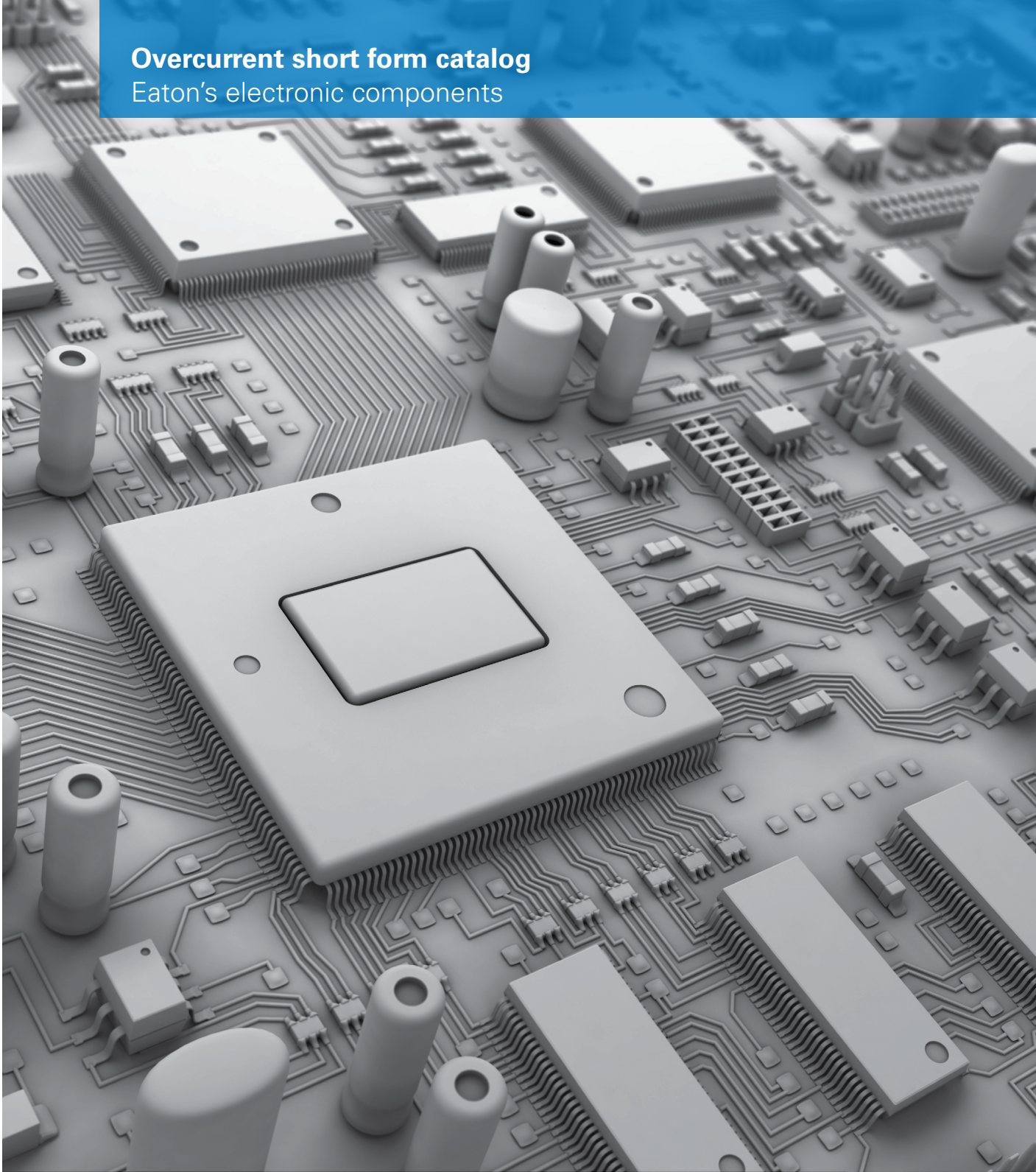


Overcurrent short form catalog
Eaton's electronic components



Powering Business Worldwide

Eaton Bussmann® series circuit protection devices: 100 years of history

Eaton products can help safeguard virtually all forms of electronic equipment and devices. For over 100 years, Eaton's Bussmann series has been at the forefront of cutting-edge design and development of circuit protection devices for the industrial, automotive, energy management, computing, medical, and consumer markets.

Eaton offers its Bussmann series one-time fuses, fuse accessories, PTC resettable fuses, and ESD suppressors in a broad range of specifications for numerous applications.

Fuses

Almost every electronic device – from portable and consumer devices to those utilized in automotive, medical, and industrial applications – requires some degree of protection against overcurrent events. The most efficient and reliable form of overcurrent protection is the one-time fuse. As the name implies, a one-time fuse opens a circuit to prevent damage from short circuit overcurrent or overload conditions as a positive disconnect and can be replaced afterward.

Eaton's fuses serve two critical purposes: they protect components, equipment, and people from the risk of electric fire or shock caused by damaging overcurrents; they reliably isolate subsystems from the main system once a fault has occurred.

PTC Resettable fuses

Eaton Bussmann series Positive Temperature Coefficient (PTC) resettable fuses are circuit protection devices that provide overcurrent and overtemperature protection. PTC resettable fuses can provide overcurrent protection during fault events similar to one-time fuses, but they are resettable, allowing them to achieve longer use over the product's lifetime.

Each PTC fuse consists of a positive temperature coefficient material whose internal resistance increases exponentially with an increase in operating temperature. Eaton PTC resettable fuses have two functional states — ON and OFF. In the ON, or "tripped" state, the device offers very high resistance in response to faults such

as short-circuiting or overheating. This limits current flow through the device until the fault is removed and the material cools, then reverts to low resistance mode. In the OFF, or "standby" state, the device maintains a low resistance as the current is within a safe range.

Selecting Eaton Bussmann series fuses

Eaton offers an extensive selection of fuses in a variety of configurations. Selecting the most suitable fuse for a specific application involves considering a wide variety of parameters. However, this catalog offers a simplified approach for choosing Eaton Bussmann® series fuses based on fuse type, technology, and footprint.

For more information on Eaton's fuses, check out our [fuse technology page](#) or our [parametric search tool](#). Similarly, you can learn more about selecting fuse holders and consult Eaton's fuse accessory selection guide for relevant product specifications.

Cartridge and axial leaded fuses

1/4" x 1-1/4" (6.3 x 32 mm) - 3AG/3AB
 1/4" x 1" (6.3 x 25 mm) - 8AG
 1/4" x 7/8" - 7AG
 1/4" x 5/8" - 1AG
 1/4" with length rejection
 5 x 20 mm
 5 x 15 mm - 2AG
 3 x 10 mm
 3 x 8 mm

Fuseholders

Panel mount fuseholder
 In-line fuseholder
 Fuseblock
 Circuit board mount fuseholders
 Fuseclips

Radial leaded fuses

Rectangular body
 Cylindrical body

Surface mount fuses

0603 (1608)
 1145 (4317)
 1206 (3216)
 2410 (6125)
 4010 (1025)
 4818 (1245)
 1350 (5119)
 2822 (7358)

PTC resettable fuses

Surface mount
 Low resistance surface mount
 Radial (through hole)
 Automotive

Applications

	COMPUTING				CONSUMER				ENERGY			INDUSTRIAL				MEDICAL			TRANSPORTATION										
	Wireless Communication	Wired Communication	Storage	Servers	Appliances	Toys	TV/Monitor/Display	Set-Top Boxes	Wearable Electronics	Personal Communications	Personal Computing / Peripherals	Metering	Distribution	Generation	Mission Critical Power	Lighting & Security	Building & Home Control	Test & Measurement	Manufacturing Automation	Hospital Systems	Equipment	Consumable	Personal	Electric vehicle	Interior	Infotainment	Lighting	Safety Systems	Under-the-Hood
Cartridge fuse (1/4 inch)	●	●		●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●		●	●					
Cartridge fuse (3 mm)						●	●	●		●	●							●	●				●	●					
Cartridge fuse (5 mm)		●		●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●	●	●					
Radial leaded fuse				●	●		●	●		●	●				●	●	●	●	●	●	●	●	●	●					
Surface mount fuses		●	●	●	●	●	●	●	●	●	●				●	●	●	●	●	●		●	●	●	●	●	●	●	●
Fuse holders		●		●	●	●	●	●				●	●	●	●	●	●	●	●	●	●	●	●	●					
PTC Resettable fuses			●			●	●	●	●	●	●						●			●	●	●	●	●	●	●	●	●	

Cartridge and axial leaded fuses

6.3 x 32 mm 1/4" x 1-1/4" (3AG/3AB)



Fuse family	Max voltage rating	Ampacity range	Max interrupting rating	Performance standard	Opening characteristics
ABC	250 Vac 125 Vdc	0.25 to 30 A	10 kA (Vac) 10kA (Vdc)	UL 248	fast-acting
ADC	500 Vac 500 Vdc	12 to 30 A	30 kA (Vac) 20 kA (Vdc)	UL 248	fast-acting
AGC	250 Vac	0.10 to 40 A	10 kA	UL 248	fast-acting
AHC	600 Vac 500 Vdc	1 to 30 A	20 kA (Vac) 20 kA (Vdc)	UL 248	fast-acting
AHCA	600 Vac 500 Vdc	1 to 30 A	20 kA (Vac) 20 kA (Vdc)	UL 248	fast-acting
GBB	250 Vac 125 Vdc	1.0 to 30 A	10 kA (Vac) 10 kA (Vdc)	UL 248	very fast-acting
GBA/GLD	125 Vac	0.50 to 15 A	10 kA	UL 248	fast-acting
MDA	250 Vac 125 Vdc	0.25 to 30 A	10 kA (Vac) 10 kA (Vdc)	UL 248	time-delay
MDH	600 Vac	21 A	200 A	UL 248	high I ₂ t
MDL	250 Vac	0.0625 to 30 A	10 kA	UL 248	time-delay
MDQ	250 Vac	0.0625 to 15 A	1 kA	UL 248	very time-delay
TDC10	1000 Vac	0.05 to 25 A	250 A	BS2950A	fast-acting
TDC11	1000 Vac	0.05 to 10 A	100 A	BS2950A	time-delay

6.3 x 25 mm 1/4" x 1" (8AG)



Fuse family	Max voltage rating	Ampacity range	Max interrupting rating	Performance standard	Opening characteristics
AGX	250 Vac	0.1 to 30 A	10 kA	UL 248	fast-acting
TDC180	240 Vac	1.0 to 13 A	6 kA	BS1362	fast / medium acting
TDC600	600 Vac	2.0 to 10 A	10 kA	BS1362	fast-acting

1/4" x 7/8" (7AG)



Fuse family	Max voltage rating	Ampacity range	Max interrupting rating	Performance standard	Opening characteristics
AGW	32 Vac	1.0 to 30 A	1 kA	UL 248	fast-acting

1/4" x 5/8" (1AG)



Fuse family	Max voltage rating	Ampacity range	Max interrupting rating	Performance standard	Opening characteristics
AGA	250 Vac	0.25 to 10 A	1 kA	UL 248	fast-acting

1/4" with length rejection



Fuse family	Max voltage rating	Ampacity range	Max interrupting rating	Performance standard	Opening characteristics
SFE	32 V	4.0 to 30 A		UL 275	fast-acting

Cartridge and axial leaded fuses

5 x 20 mm



Fuse family	Max voltage rating	Ampacity range	Max interrupting rating	Performance standard	Opening characteristics
GMA	250 Vac	0.063 to 15 A	10 kA	UL 248	fast-acting
GMC	250 Vac	0.063 to 10 A	10 kA	UL 248	medium time-delay
GMD	250 Vac	0.125 to 4 A	10 kA	UL 248	time-delay
S500	250 Vac	0.032 to 10 A	100 A	IEC 60127-2	fast-acting
S501	250 Vac	0.05 to 10 A	1.5 kA	IEC 60127-2	fast-acting
S505	250 Vac	0.5 to 12 A	1.5 kA	IEC 60127-2	time-delay
S505SC	250 Vac	1.0 A to 10 A	1.5 kA	IEC 60127-2	time-delay
S505H	600 Vac 400 Vdc	0.5 to 20 A	1.5 kA (Vac) 1.5 kA (Vdc)	IEC 60127-2	time-delay
S505SCH	250 Vac	3.15 to 6.3 A	1.5 kA	IEC 60127-2	time-delay high I ₂ t
S506	250 Vac	0.032 to 15 A	125 A	IEC 60127-2	time-delay
S520	420 Vac	8.0 to 20 A	1.5 kA	IEC 60127-2	fast-acting

5 x 15 mm (2AG)



Fuse family	Max voltage rating	Ampacity range	Max interrupting rating	Performance standard	Opening characteristics
C515	250 Vac	0.125 to 7 A	10 kA	UL 248	time-delay
C517	350 Vac	3.0 A	10 kA	UL 248	fast-acting
C518	250 Vac	0.1 to 5 A	10 kA	UL 248	fast-acting
C519	250 Vac	0.125 to 5 A	10 kA	UL 248	time-delay
C520	250 Vac	0.1 to 5 A	10 kA	UL 248	fast-acting

3 x 10 mm



Fuse family	Max voltage rating	Ampacity range	Max interrupting rating	Performance standard	Opening characteristics
C310FH	250 Vac	1.25 to 2 A	150 A	IEC 60127-3	fast-acting
C310-SC	250 Vac	2.0 to 8.0 A	80 A	IEC 60127-3	time-delay

3 x 8 mm



Fuse family	Max voltage rating	Ampacity range	Max interrupting rating	Performance standard	Opening characteristics
C308F	250 Vac 250 Vdc	0.04 to 0.25 A	4 kA (Vac) 4 kA (Vdc)	EN60079-11	fast-acting

Fuseholders

Panel mount fuseholder



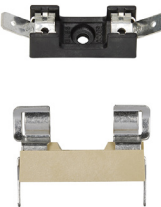
Family	Max voltage rating	Max current rating	Fuses accepted	Circuit connections	3rd party certifications
HTB-xxl	250 V	20 A	1/4" x 1 1/4" (6.3 mm x 32 mm)	Wire Quick-connect	UL CSA
HTB-xxM	250 V	16 A	5 x 20 mm	Wire Quick-connect	UL CSA VDE
HTJ	250 V	15 A	1/4" x 1 1/4" (6.3 mm x 32 mm)	Wire Quick-connect	UL
HTC	250 V	10 A	5 x 20 mm	Wire	UL
HKP	250 V	30 A	1/4" x 1 1/4" (6.3 mm x 32 mm)	Wire Quick-connect	UL CSA
HVP	480 V	30 A	1/4" x 1 1/4" (6.3 mm x 32 mm)	Wire Quick-connect	UL
HK	250 V	20 A	1/4" x 1 1/4" (6.3 mm x 32 mm)	Wire	UL CSA
HMR	250 V	30 A	1/4" x 1 1/4" (6.3 mm x 32 mm)	Wire	
HGA	250 V	30 A	1/4" x 1 1/4" (6.3 mm x 32 mm)	Wire	
HLD	250 V	15 A	1/4" x 1 1/4" (6.3 mm x 32 mm)	Wire Quick-connect	UL
HJM	250 V	30 A	1/4" x 1" (6.3 mm x 25 mm)	Wire Quick-connect	UL
HJL	250 V	15 A	1/4" x 1" (6.3 mm x 25 mm)	Wire	
HP	600 V	30 A	13/32" x 1 1/2" (10 x 38 mm)	Wire Quick-connect	UL

In-line fuseholder



Family	Max voltage rating	Max current rating	Fuses accepted	Circuit connections	3rd party certifications
HHN	32 V	30 A	1/4" x 1 1/4" (6.3 mm to 32 mm)	Wire	
HHB	32 V	30 A	1/4" x 7/8" to 1/4" x 1 1/4"	Wire	
HFA	250 V	20 A	1/4" x 1 1/4" (6.3 mm to 32 mm)	Wire Quick-connect	UL
HFB	32 V	30 A	1/4" x 1 1/4" (6.3 mm to 32 mm)	Wire	
HHK	32 V	20 A	1/4" x 1 1/4" (6.3 mm to 32 mm)	Wire	
HRK	32 V	15 A	1/4" x 7/8" to 1/4" x 1 1/4"	Wire	
HHI/HHJ	250 V	30 A	1/4" x 1" to 1/4" x 1 1/4"	Wire	
HHT	600 V	10 A	5 mm x 15 mm to 5 mm x 20 mm	Wire	
HHF-JFCU	32 V	20 A	ATC blade fuses	Wire	
HVI	600 V	20 A	1/4" x 1 1/4" (6.3 mm to 32 mm)	Wire Quick-connect	UL

Fuseblock



Family	Max voltage rating	Max current rating	Fuses accepted	Circuit connections	3rd party certifications
S-8000	600 V	30 A	1/4" x 1 1/4"	Solder Quick-connect Screw	UL CSA
S-4000	250 V	25 A	1/4" x 1 1/4"	Solder Quick-connect Thru-hole	UL
HTC-5x8M	250 V	15 A	5 mm x 20 mm	Solder Quick-connect	
HTC-15M	250 V	20 A	5 mm x 20 mm	Thru-hole	cURus
HTC-60M	250 V	20 A	5 mm x 20 mm	Thru-hole	
HTC-78M	250 V	20 A	5 mm x 20 mm	Thru-hole	cURus

Circuit board mount fuseholders



Family	Max voltage rating	Max current rating	Fuses accepted	Circuit connections	3rd party certifications
HBx-L	250 V	16 A	1/4" x 1 1/4"	Thru-hole	UL CSA SEMKO VDE
HBx-M	250 V	16 A	5 x 20 mm	Thru-hole	UL CSA SEMKO VDE
H15	250 V	10 A	5 x 20 mm	Thru-hole	cURus VDE
BK-PCS	250 V	6.3 A	Radial	Thru-hole	

Fuseclips



Family	Max current rating	Fuses accepted	Circuit connections	3rd party certifications
1Axxx	40 A	10 mm	Thru-hole	cURus
	30 A	1/4" (6.3 mm)	Thru-hole	cURus
	10 A	5 mm	Thru-hole	
	15 A	ATC/ATM auto blade fuses	Thru-hole	
HTC-2xx	6.3 A	5 mm	Thru-hole	

Radial leaded fuses

Rectangular body



Family	Max voltage rating	Ampacity range	Max interrupting rating	Performance standard	Opening characteristics
SS-5	250 Vac	0.2 to 6.3 A	63 A	IEC 60127-3	time-delay
SS-5F	250 Vac	0.8 to 10 A	50 A	UL 248	fast-acting
SS-5H	300 Vac	1.0 to 6.3 A	100 A	IEC 60127-3	time-delay
SS-5FH	350 Vac 150 Vdc	3.15 A	100 A	UL 248	fast-acting
PC Tron	250 Vac 450 Vdc	0.5 to 5 A	5.9 kA	UL	fast-acting

Cylindrical body



Family	Max voltage rating	Ampacity range	Max interrupting rating	Performance standard	Opening characteristics
SR-5	250 Vac	0.10 to 6.3 A	63 A	IEC 60127-3	time-delay
SR-5F	250 Vac	0.8 to 10 A	50 A	UL 248	fast-acting
SR-5H	300 Vac	0.4 to 6.3 A	100 A	IEC 60127-3	time-delay
GMW	125 Vac	0.01 to 5 A	35 A	UL	fast-acting

Chip fuses

0603 (1608)



Family	Max voltage rating	Ampacity range	Max interrupting rating	Construction	Opening characteristics
0603FA	32 Vac 50 Vdc	0.25 to 5 A	50 A	Solid matrix	fast-acting
0603HV	63 Vdc	0.5 to 1.5 A	50 A	Solid matrix	fast-acting
CC06H	32 Vdc	1.0 to 8.0 A	50 A	Solid matrix	high I ₂ t
CC06FA	63 Vdc	0.5 to 1.5 A	50 A	Solid matrix	fast-acting

1206 (3216)



Family	Max voltage rating	Ampacity range	Max interrupting rating	Construction	Opening characteristics
3216FF	32 Vac 63 Vdc	0.25 to 30 A	300 A (Vac/Vdc)	Solid matrix	fast-acting
3216LV	125 Vac 125 Vdc	0.25 to 1.5 A	125 A (Vac/Vdc)	Solid matrix	fast-acting
3216TD	32 Vac 32 Vdc	6.3 to 12 A	35 A (Vac/Vdc)	Wire in air	time-delay
CC12H	63 Vdc	0.25 to 30 A	200 A (Vdc)	Solid matrix	high I ₂ t

Surface mount fuses

Brick fuses

2410 (6125)



Family	Max voltage rating	Ampacity range	Max interrupting rating	Construction	Opening characteristics
6125FF	125 Vac 72 Vdc	0.5 to 15 A	50 A (Vac) 300 A (Vdc)	Wire in air	fast-acting
CB61F	125 Vac 125 Vdc	2.0 to 40 A	100 A (Vac) 500 A (Vdc)	Wire in air	fast-acting
6125TD	125 Vac 60 Vdc	0.5 to 7 A	50 A (Vac) 50 A (Vdc)	Wire in air	time-delay

4010 (1025)



Family	Max voltage rating	Ampacity range	Max interrupting rating	Construction	Opening characteristics
1025FA	250 Vac 125 Vdc	0.25 to 15 A	50 A (Vac) 50 A (Vdc)	Wire in air	fast-acting
1025HC	250 Vac 72 Vdc	20 to 30 A	100 A (Vac) 500 A (Vdc)	Wire in air	fast-acting
1025TD	250 Vac 125 Vdc	0.25 to 5 A	50 A (Vac) 50 A (Vdc)	Wire in air	time-delay
TCP	600 Vac	0.5 to 2 A	60 A	Wire in air	time-delay

1145 (5119)



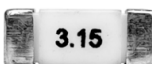
Family	Max voltage rating	Ampacity range	Max interrupting rating	Construction	Opening characteristics
1145HV	500 Vdc	1 to 5 A	100 A (Vac)	Wire in air	fast-acting
1145HVA	500 Vdc	1 to 5 A	100 A (Vac)	Wire in air	fast-acting

4818 (1245)



Family	Max voltage rating	Ampacity range	Max interrupting rating	Construction	Opening characteristics
1025HC	250 Vac 72 Vdc	40 to 50 A	300 A (Vac) 600 A (Vdc)	Wire in air	fast-acting
1245HC	125 Vac 80 Vdc	60 to 100 A	500 A (Vac) 1000 A (Vdc)	Wire in air	fast-acting
1245UMFT	250 Vac	1 to 6.3 A	100 A (Vac)	Wire in air	time-delay
1245UMFE	350 Vac 250 Vdc	0.5 to 6.3 A	100 A (Vac)	Wire in air	fast-acting

1350 (4317)



Family	Max voltage rating	Ampacity range	Max interrupting rating	Construction	Opening characteristics
1350HV	600 Vdc	1 to 5 A	100 A (Vac) 100 A (Vdc)	Wire in air	fast-acting

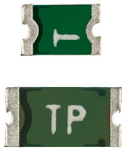
2822 (7358)



Family	Max voltage rating	Ampacity range	Max interrupting rating	Construction	Opening characteristics
2822HC	72 Vdc	40 to 125 A	1000 A (Vac) 72 A (Vdc)	Wire in air	high current

PTC resettable fuses

Surface mount



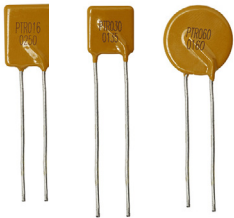
Family	Footprint	Voltage rating	Hold current range	Max fault current	3rd party certifications
PTS0603	0603	6 to 15 Vdc	0.04 to 0.35 A	8 A	cURus TUV
PTS0805	0805	6 to 24 Vdc	0.1 to 0.75 A	100 A	cURus TUV
PTS1206	1206	6 to 60 Vdc	0.05 to 2 A	100 A	cURus TUV
PTS1812	1812	6 to 60 Vdc	0.1 to 3 A	100 A	cURus TUV
PTSA0805	0805	15 Vdc	0.10 to 0.12 A	20 A	-
PTSA1206	1206	13.2 to 60 Vdc	0.1 to 0.5 A	40 A	-
PTSA1210	1210	13.2 Vdc	0.5 A	40 A	-
PTSA1812	1812	16 to 60 Vdc	0.1 to 2.6 A	100 A	-
PTSAHT0805	0805	16 Vdc	0.1 A	40 A	-
PTSAHT1206	1206	16 to 30 Vdc	0.16 to 0.5 A	50 A	-

Low resistance surface mount



Family	Footprint	Voltage rating	Hold current range	Max fault current	3rd party certifications
PTSLR0603	0603	6 to 8 Vdc	0.5 to 6.0 A	50 A	cURus TUV
PTSLR0805	0805	6 to 8 Vdc	0.75 to 4.5 A	50 A	cURus TUV
PTSLR1206	1206	6 Vdc	0.75 to 7.0 A	50 A	cURus TUV
PTSLR1210	1210	6 Vdc	1.75 to 7.5 A	50 A	cURus TUV
PTSLR1812	1812	6 Vdc	1.90 to 5.0 A	50 A	cURus TUV

Through hole



Family	Footprint	Voltage rating	Hold current range	Max fault current	3rd party certifications
PTR016V	Radial	16 V	0.9 to 15 A	100 A	cURus TUV
PTR030V	Radial	30 V	0.9 to 9 A	100 A	cURus TUV
PTR060V	Radial	60 V	0.1 to 3.75 A	40 A	cURus TUV

Tools

Eaton's electronics product selection tools



PARAMETRIC SEARCH

Drill down into the Eaton Electronics product database to find the right part for your application.



IC MATCHING

Find the Eaton Electronics parts called out on IC manufacturers' demo and evaluation boards.



CROSS REFERENCE

Find a cross to a competitor's product or to an alternate Eaton Electronics part number.



AUTOMOTIVE ELECTRONICS SOLUTIONS

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