



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Expertise Applied | Answers Delivered



CIRCUIT
PROTECTION
SOLUTIONS FOR
AUTOMOTIVE
APPLICATIONS



Automotive

Passenger Car Solutions



Our offering of automotive circuit protection solutions encompasses a wide range of applications:

- Powertrain**
 - Engine Management
 - Transmission Control
 - Cooling Fan
 - Water Pump
- Safety**
 - ABS
 - EPAS
 - Air Bag
 - Chassis Control
- Comfort**
 - Window Lift
 - Sun Roof
 - Door Lock
 - Power Seat
 - HVAC
- Infotainment**
 - Dashboard
 - Navigation
 - In-Car Entertainment
- Fuse Box**
- Power Supply**
- Lighting**
 - Wire Harness
 - Generator
 - HID Headlight
 - Headlight Leveling
 - Directional Lighting



portfolio of Littelfuse automotive technologies, products & services

Passenger Automobiles | Aftermarket

SERVICES

Product Technologies Plus Application Design Evaluation Services

Littelfuse is the world leader in circuit protection. We offer an extensive selection of circuit protection technologies for Automotive applications. Littelfuse circuit protection expert staff can assist you in designing circuit protection for your most demanding applications. Solutions for over-current applications as well as over-voltage applications are available from Littelfuse.



CIRCUIT PROTECTION TECHNOLOGIES (1-8)

1. Fuses/Footprint Reduction

MICRO2™, MICRO3™ fuses

2. Medium Current Cartridge Fuses

MCASE+™ cartridge fuses; considerably smaller than JCASE® and Low Profile JCASE® fuses

3. Discrete High Current Fuses

High Current Bolt Down fuses and fuse arrays

4. ZCase Masterfuse

Smallest high current distribution product in the industry

5. Masterfuse

High current distribution array

6. ZCase Single MEGA

Minimal Footprint Bolt Down fuse

7. High Voltage Fuses

Low-current fuses for Electric and Hybrid Electric Vehicles

8. Battery Cable Protection

CABLE PRO® protectors for mounting directly inline as part of a high power cable assembly



Blade Fuses	1
Cartridge Fuses	10
High Current Fuses	16
Cable & PAL Fuses	39
High Voltage Fuses	43
Specialty Products	48
Fuseology	50



Helping to make the World a Cleaner Place to Live

Littelfuse and the Environment

As members of the global community, we at Littelfuse have always strived to understand the impact of what we do, and of what we create, on the world around us. Because of this, our concern for the environment has always been an integral and fundamental part of our business. We continually work to balance our business objectives with the need to protect and improve the local and global environment.

Our Strategy for the Design of Eco-friendly Products

Littelfuse has established a focused program committed to developing high-performance eco-friendly products along with a comprehensive set of processing/reliability data and technical process expertise. This includes processes for eliminating, detecting and documenting the presence of hazardous materials such as

- Lead
- Cadmium
- Hexavalent Chromium
- Mercury
- Brominated flame-retardants (PBBs and PBDEs)

The Littelfuse strategy for eco-friendly products is specifically designed to help support our worldwide customers in their transition to Lead-Free processing.



All products considered to be lead-free are marked with this symbol.

Littelfuse defines lead-free as products which contain less than 1000ppm (0.1%) Lead, measured by weight of the entire product.



All RoHS compliant products are marked with this symbol.

Littelfuse follows the requirement set by the European Union for all RoHS compliant products. The European Union Directive 2002/95/EC RoHS restricts the use of Lead, Mercury, Hexavalent Chromium, Cadmium and Brominated flame-retardants (PBBs and PBDEs)

Visit www.littelfuse.com/lead-free for further information.

Blade Fuses

MICRO2™ Blade Fuse 32V	2
MICRO3™ Blade Fuse 32V	3
Low Profile MINI® Fuses Rated 58V	4
MINI® Blade Fuse Rated 32V	5
MINI® Blade Fuse Rated 58V	6
ATOF® Blade Fuse Rated 32V	7
MAXI® Blade Fuse Rated 32V	8
MAXI® Blade Fuse Rated 58V	9





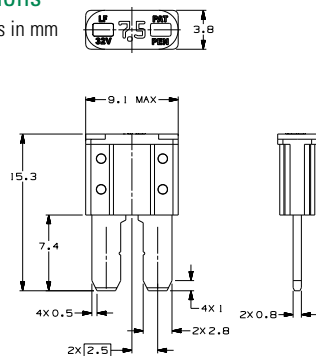
MICRO2™ Blade Fuses



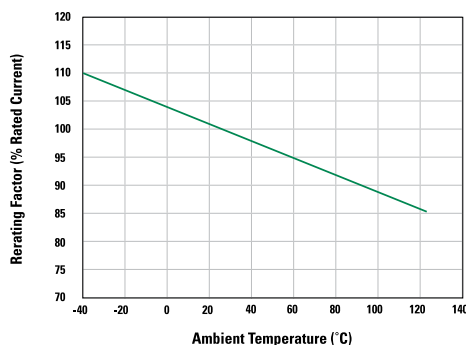
MICRO2™ Sn
(Tin plated) Blade Fuses

Dimensions

Dimensions in mm



Temperature Derating Curve



MICRO2™ Blade Fuses Rated 32V

The MICRO2™ Fuse is the new standard for vehicle circuit protection. Its sub-miniature design meets the need for more circuits to be protected while utilizing less space and its ability to cope with high temperatures in adverse environments makes the MICRO2™ Fuse of recommended choice for protection.

Black amperage stamps are used on the 20A & 25A / light colored housings to improve contrast for vision system inspection.

Specifications

	MICRO2 (Silver Plated)	MICRO2 Sn (Tin Plated)
Voltage Rating:	32 VDC	32 VDC
Interrupting Ratings:	1000A @ 32 VDC	1000A @ 32 VDC
*Component Level Temperature Range:	-40°C to +125°C	-40°C to +105°C
**System Level Temperature Range:	-40°C to +105°C	-40°C to +85°C
<i>105°C and 85°C are typical system level temperature requirements.</i>		
Terminals:	Ag plated zinc alloy	Sn plated zinc alloy
Housing Material:	PA66	PA66
Conforms to:	SAE 2741 and ISO 8820-3 in reference to electrical, mechanical and environmental performance requirements	

RoHS

Ordering Information

Part Number	Package Size
0327xxx.YX2S	4000
0327xxx.UXS	500
0327xxx.LXS	50
MICRO2 Sn Fuse	
0327xxx.YX2T	4000

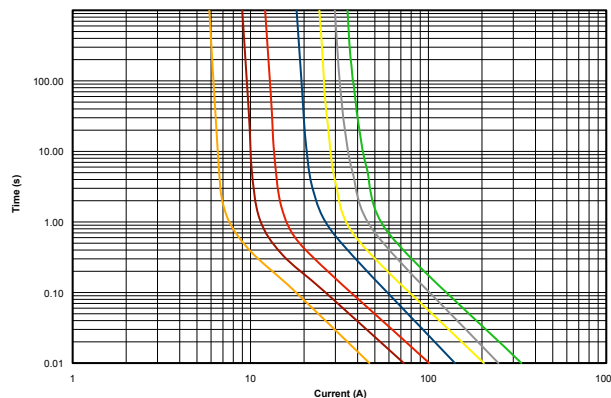
Time-Current Characteristics

Part Number	Package Size	% of Rating	Opening Time Min / Max
0327xxx.YX2S	4000	110	100 h / -
0327xxx.UXS	500	135	0.75 sec / 120 sec
0327xxx.LXS	50	160	0.30 sec / 50 sec
MICRO2 Sn Fuse		200	0.15 sec / 5 sec
0327xxx.YX2T	4000	350	0.04 sec / 0.50 sec
		600	0.02 sec / 0.100 sec

Ratings

Part Number	Current Rating (A)	Housing Material Color	Typ. Voltage Drop (mV)	Cold Resistance (mΩ)	I²t (A²s)
0327005_	5	Brown	116	17.4	17
032707.5_	7.5	Dark Red	106	10.8	47
0327010_	10	Red	102	7.7	89
0327015_	15	Blue	94	4.9	189
0327020_	20	Yellow	91	3.5	397
0327025_	25	White	90	2.6	585
0327030_	30	Green	88	2.1	1028

Time-Current Characteristic Curves



Component Level Temperature** = the maximum ambient temperature that a single fuse will survive. This does not factor-in the heat from a populated fuse box, but does include the heat from the current load with the proper derating. *System Level Temperature** represents the ambient temperature of the fuse box at a location within the vehicle. The temperature within a populated fuse box (in a given location) will be higher. The limiting factor is the plating. Sn-plating's temperature limit is ≈130°C, and Ag-plating allows up to 150°C at the terminal interface.



MICRO3™ Blade Fuses Rated 32V

The MICRO3™ Fuse has 3 terminals and 2 fuse elements with a common center terminal. Its sub-miniature design meets the need for more circuits to be protected while utilizing less space and its ability to cope with high temperatures in adverse environments makes the MICRO3™ Fuse of recommended choice for protection.

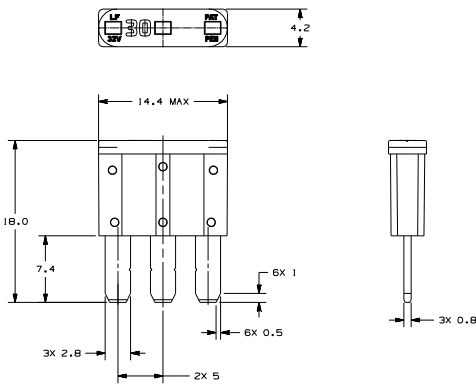
Specifications

Voltage Rating:	32 VDC
Interrupting Ratings:	1000A @ 32 VDC
*Component Level Temperature Range:	-40°C to +125°C
**System Level Temperature Range:	-40°C to +105°C
<i>105°C is a typical system level temperature requirement.</i>	
Terminals:	Ag plated zinc alloy
Housing Material:	PA66
Conforms to:	SAE 2741 and ISO 8820-3 in reference to electrical, mechanical and environmental performance requirements

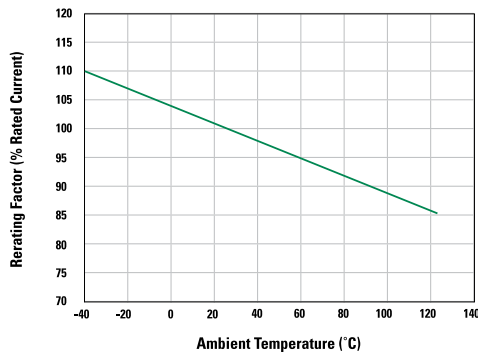
RoHS

Dimensions

Dimensions in mm



Temperature Derating Curve



***Component Level Temperature** = the maximum ambient temperature that a single fuse will survive. This does not factor-in the heat from a populated fuse box, but does include the heat from the current load with the proper derating.
****System Level Temperature** represents the ambient temperature of the fuse box at a location within the vehicle. The temperature within a populated fuse box (in a given location) will be higher. The limiting factor is the plating. Sn-plating's temperature limit is ≈130°C, and Ag-plating allows up to 150°C at the terminal interface.

Ordering Information

Part Number	Package Size
0337xxx.PX2S	2000
0337xxx.LXS	50

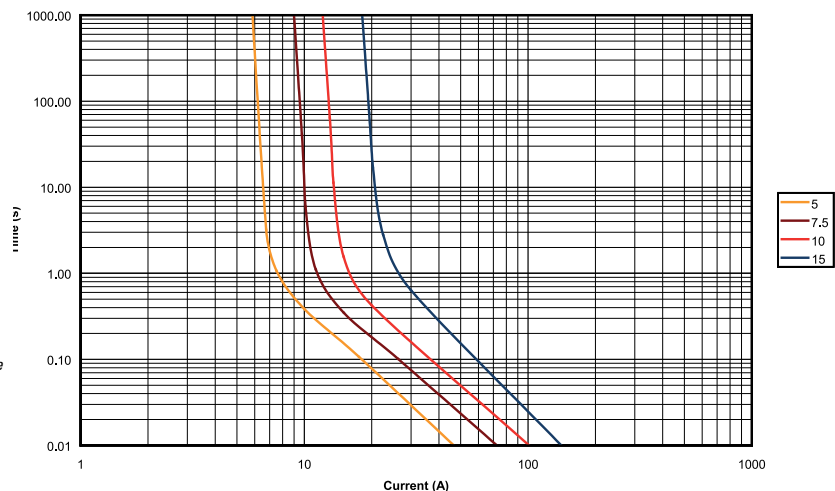
Time-Current Characteristics

% of Rating	Opening Time (Min / Max)
110	100 h / –
135	0.75 sec / 120 sec
160	0.30 sec / 50 sec
200	0.15 sec / 5 sec
350	0.04 sec / 0.50 sec
600	0.02 sec / 0.100 sec

Ratings

Part Number	Current Rating (A)	Housing Material Color	Typ. Voltage Drop (mV)	Cold Resistance (mΩ)	I²t (A²s)
0337005_	5	Brown	116	17.4	17
033707.5_	7.5	Red	106	10.8	47
0337010_	10	Blue	102	7.8	89
0337015_	15	Orange	94	4.9	189

Time-Current Characteristic Curves



Low Profile MINI® Blade Fuses Rated 58V

The Low Profile MINI® fuse has similar performance characteristics as the standard MINI® fuse. The lower overall height allows for more space and weight savings. The Low Profile MINI® fuse is designed to mate with tuning-fork terminals, which provides additional weight and material savings in fuse box designs by eliminating the need for female box terminals.

Specifications

Voltage Rating: 58 VDC
 Interrupting Rating: 1000A @ 58 VDC
 *Component Level Temperature Range: -40°C to +125°C
 **System Level Temperature Range: -40°C to +105°C
105°C is a typical system level temperature requirement.
 Terminals: Ag plated zinc
 Housing Material: PA66
 Complies with: ISO 8820-9



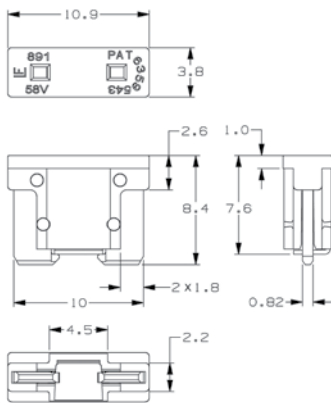
Low Profile MINI® Blade Fuses



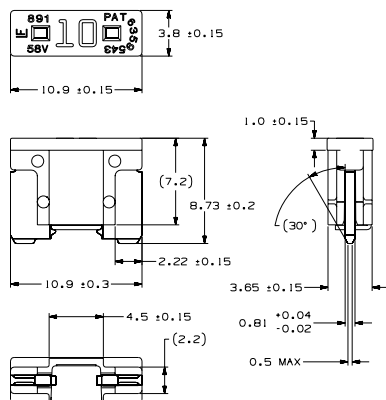
Low Profile MINI® 10.9mm Blade Fuses

Dimensions

Dimensions in mm



Low Profile MINI® 10.9mm



Ordering Information

Part Number	Package Size	Plating
0891xxx.NXS	5000	Ag
0891xxx.U	500	Ag
0891xxx.H	100	Ag
Low Profile MINI® 10.9mm Fuse		
0891xxx.NXWS	5000	Ag

Time-Current Characteristics

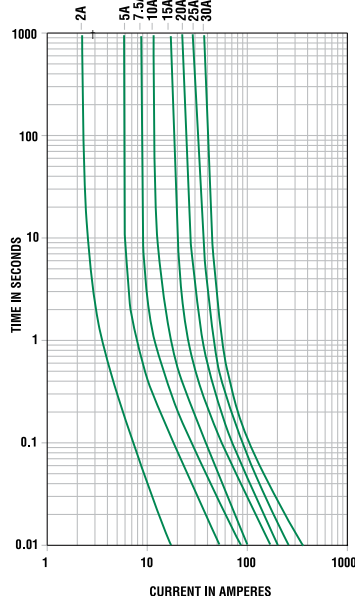
% of Rating	Opening Time Min / Max (s)
110	360,000 s / -
135	0.750 s / 120 s
200	0.150 s / 5 s
350	0.080 s / 0.250 s
600	0.030 s / 0.100 s

Ratings

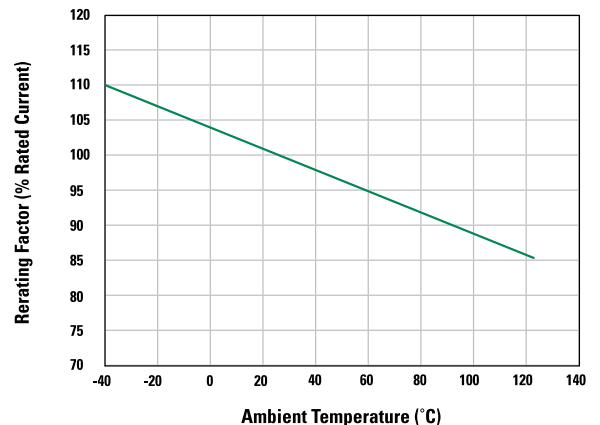
Part Number	Current Rating (A)	Housing Material Color	Cold Resistance (mΩ)	I ² t (A ² s)
0891002_†	2		54.2	3
0891005_	5		17.21	22
089107.5_	7.5		10.65	53
0891010_	10		7.59	102
0891015_	15		4.70	198
0891020_	20		3.35	420
0891025_	25		2.56	613
0891030_	30		2.06	1110

† Only offered for the 10.0mm series.

Time-Current Characteristic Curves



Temperature Derating Curve



Component Level Temperature** – the maximum ambient temperature that a single fuse will survive. This does not factor-in the heat from a populated fuse box, but does include the heat from the current load with the proper derating. *System Level Temperature** represents the ambient temperature of the fuse box at a location within the vehicle. The temperature within a populated fuse box (in a given location) will be higher. The limiting factor is the plating. Sn-plating's temperature limit is -130°C, and Ag-plating allows up to 150°C at the terminal interface.

Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.

MINI® Blade Fuses Rated 32V

The MINI® Fuse is the standard for vehicle circuit protection. Its miniature design meets the need for more circuits to be protected while utilizing less space, and its ability to cope with high temperatures in adverse environments makes the MINI® Fuse of recommended choice for protection.

Specification

	MINI (Silver Plated)	MINI Sn (Tin Plated)
Interrupting Rating:	1000A @ 32 VDC	1000A @ 32 VDC
Voltage Rating:	32 VDC	32 VDC
*Component Level Temperature Range:	-40°C to +125°C	-40°C to +105°C
**System Level Temperature Range:	-40°C to +105°C	-40°C to +85°C
<i>105°C and 85°C are typical system level temperature requirements.</i>		
Terminals:	Ag plated zinc alloy	Sn plated zinc alloy
Housing Material:	PA66	PA66
Complies with:	SAE J2077, ISO 8820-3, UL 248 Special Purpose Fuses	SAE J2077, ISO 8820-3 not UL recognized



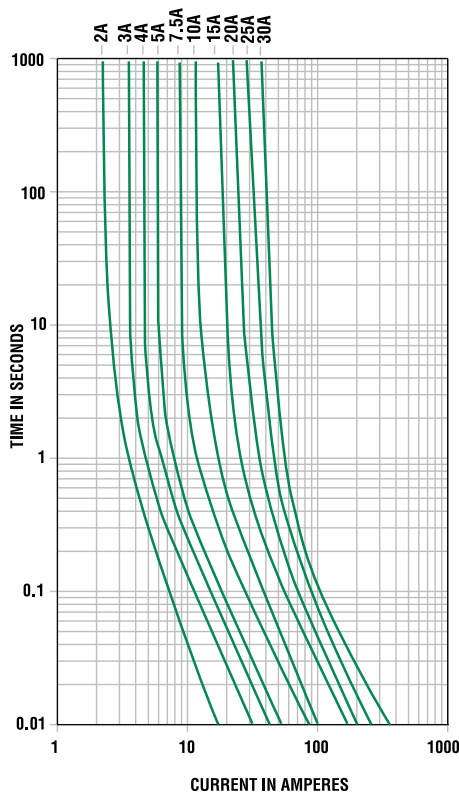
Ordering Information

Part Number	Package Size
0297xxx.WXNV	3000
0297xxx.U	500
0297xxx.H	100
0297xxx.L	50
MINI® Sn Fuse	
0297xxx.WXT	3000

Time-Current Characteristics

% of Rating	Opening Time Min / Max (s)
110	360,000 s / -
135	0.75 s / 600 s
200	0.15 s / 5 s
350	0.080 s / 0.500 s
600	0.030 s / 0.100 s

Time-Current Characteristic Curves



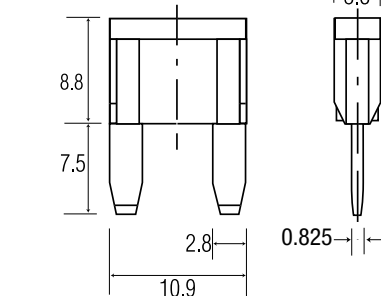
Component Level Temperature** = the maximum ambient temperature that a single fuse will survive. This does not factor-in the heat from a populated fuse box, but does include the heat from the current load with the proper rerating. *System Level Temperature** represents the ambient temperature of the fuse box at a location within the vehicle. The temperature within a populated fuse box (in a given location) will be higher. The limiting factor is the plating. Sn-plating's temperature limit is ~130°C, and Ag-plating allows up to 150°C at the terminal interface.

Ratings

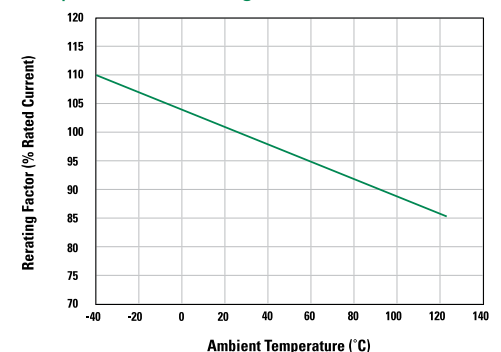
Part Number	Current Rating (A)	Housing Material Color	Typ. Voltage Drop (mV)	Cold Resistance (mΩ)	I ² t (A ² s)
0297002_	2	Grey	171	55.60	2.8
0297003_	3	Purple	153	33.75	9.4
0297004_	4	Pink	121	23.48	17
0297005_	5	Orange	129	17.75	25
029707.5_	7.5	Brown	135	10.85	68
0297010_	10	Red	108	7.42	93
0297015_	15	Blue	98	4.58	270
0297020_	20	Yellow	96	3.21	380
0297025_	25	Light Orange	86	2.36	625
0297030_	30	Green	87	1.85	1130

Dimensions

Dimensions in mm



Temperature Rerating Curve



Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.

MINI® Blade Fuses Rated 58V

MINI® style fuse for use in 42V Systems. Same Time-Current characteristic as the 32V MINI® fuse. Fits into standard MINI® fuse sockets. Has a rejection feature to prevent fuses with lower voltage rating from being wrongfully inserted into the circuit. Current rating 2A - 30A @58 VDC max.

Specifications

Interrupting Rating: 1000A @ 58 VDC
 Voltage Rating: 58 VDC
 *Component Level Temperature Range: -40°C to +125°C
 **System Level Temperature Range: -40°C to +105°C
105°C is a typical system level temperature requirement.

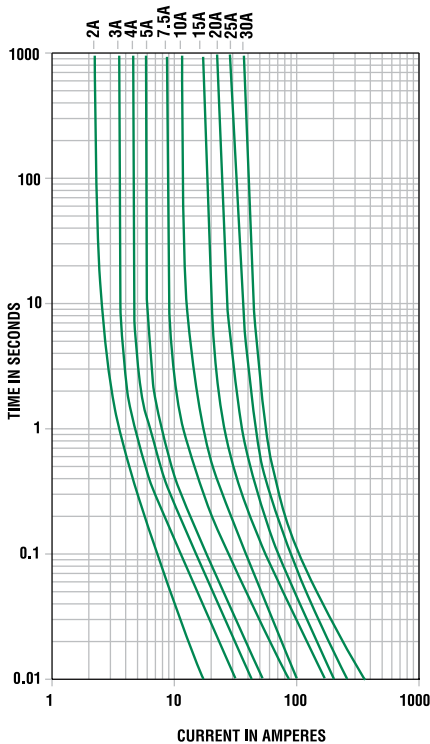
Terminals: Ag plated zinc alloy
 Housing Materials: PA66
 Complies with: SAE J2077, SAE 2576

ISO 8820
 UL 248 Special Purpose Fuses



MINI® Blade Fuses

Time-Current Characteristic Curves



Component Level Temperature** = the maximum ambient temperature that a single fuse will survive. This does not factor-in the heat from a populated fuse box, but does include the heat from the current load with the proper rerating. *System Level Temperature** represents the ambient temperature of the fuse box at a location within the vehicle. The temperature within a populated fuse box (in a given location) will be higher. The limiting factor is the plating. Sn-plating's temperature limit is ~130°C, and Ag-plating allows up to 150°C at the terminal interface.

Ordering Information

Part Number	Package Size
0997xxx.WXN	3000

Time-Current Characteristics

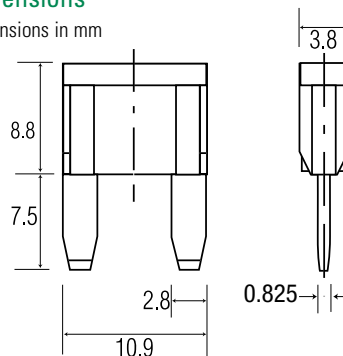
% of Rating	Opening Time Min / Max (s)
110	360,000 s / -
135	0.75 s / 600 s
200	0.15 s / 5 s
350	0.080 s / 0.500 s
600	0.030 s / 0.100 s

Ratings

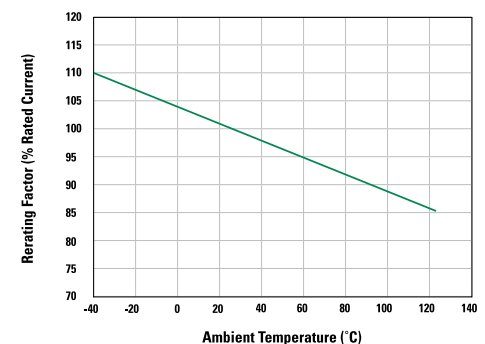
Part Number	Current Rating (A)	Housing Material Color	Typ. Voltage Drop (mV)	Cold Resistance (mΩ)	I ² t (A ² s)
0997002_	2	Grey	171	55.60	2.8
0997003_	3	Purple	153	33.75	9.4
0997004_	4	Pink	121	23.48	17
0997005_	5	Brown	129	17.75	25
099707.5_	7.5	Dark Brown	135	10.85	68
0997010_	10	Red	108	7.42	93
0997015_	15	Blue	98	4.58	270
0997020_	20	Yellow	96	3.21	380
0997025_	25	Light Orange	86	2.36	625
0997030_	30	Green	87	1.85	1130

Dimensions

Dimensions in mm



Temperature Rerating Curve



Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.

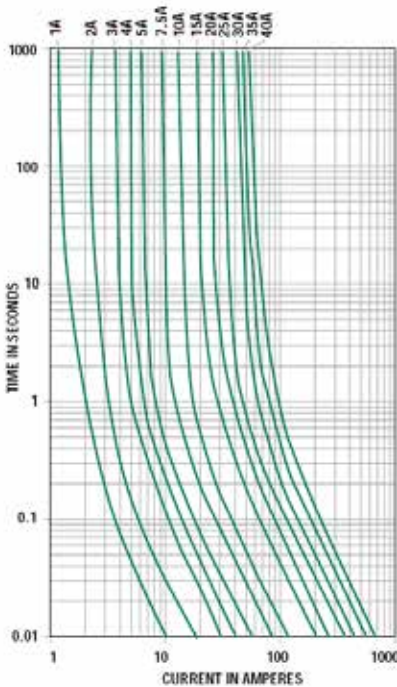


ATOF® Blade Fuses

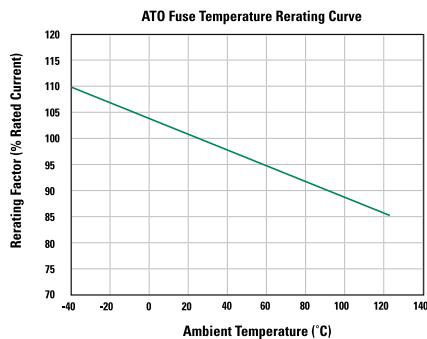


ATO® Ag (Silver plated) Blade Fuses

Time-Current Characteristic Curves



Temperature Derating Curve



ATOF® Blade Fuses Rated 32V

Developed by Littelfuse for the automotive industry, the ATOF® fuse has become the original equipment circuit protection standard for foreign and domestic automobiles and trucks. Readily identifiable and easily replaced, this fuse can be specified for a variety of low voltage electronic applications.

Specification

	ATOF® (Tin Plated)	ATO Ag (Silver Plated)
Voltage Rating:	32 VDC	32 VDC
Interrupting Rating:	1000A @ 32 VDC	1000A @ 32 VDC
*Component Level Temperature Range:	-40°C to +105°C	-40°C to +125°C
**System Level Temperature Range:	-40°C to +85°C	-40°C to +105°C
<i>105°C and 85°C are typical system level temperature requirements.</i>		
Terminals:	Sn plated zinc alloy	Ag plated zinc alloy
Housing Material:	PA66	PA66
Complies with:	SAE J1284, ISO 8820-3	SAE J1284, ISO 8820-3
UL Listed:	File AU1410	File AU1410
CSA Certified:	File No. 29862	File No. 29862



Ordering Information

Part Number	Package Size
0287xxx.PXCN	2000
0287xxx.U	500
0287xxx.H	100
0287xxx.L	50
0287xxx.PXS	2000

ATO® Ag Fuse

Time-Current Characteristics

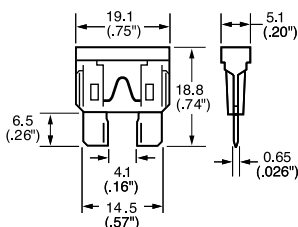
% of Rating	Current Rating	Opening Time Min / Max (s)
100	35A & 40A	360,000 s / -
110	1A-30A	360,000 s / -
135	1A & 2A 3A-40A	350 ms / 600 s 0.750 s / 600 s
160	1A-40A	250 ms / 50 s
200	1A & 2A 3A-40A	100 ms / 5.0 s 0.150 s / 5.0 s
350	1A & 2A 3A-40A	20 ms / 500 ms 80 ms / 500 ms
600	1A-30A 35A & 40A	- / 100 ms - / 150 ms

Ratings

Part Number	Current Rating (A)	Housing Material Color	Typ. Voltage Drop (mV)	Cold Resistance (mΩ)	I ² t (A ² s)
0287001_	1	Black	176	123	0.4
0287002_	2	Grey	141	53.5	1.4
0287003_	3	Purple	137	31.1	7.4
0287004_	4	Pink	136	22.8	14
0287005_	5	Brown	128	17.85	26
028707.5_	7.5	Dark Brown	116	10.91	60
0287010_	10	Red	109	7.70	115
0287015_	15	Blue	102	4.80	340
0287020_	20	Yellow	98	3.38	520
0287025_	25	Light Orange	92	2.52	1080
0287030_	30	Green	84	1.97	1510
0287035_	35	Dark Green	87	1.61	2280
0287040_	40	Orange	96	1.44	3310

Dimensions

Dimensions in mm



Component Level Temperature** = the maximum ambient temperature that a single fuse will survive. This does not factor-in the heat from a populated fuse box, but does include the heat from the current load with the proper derating. *System Level Temperature** represents the ambient temperature of the fuse box at a location within the vehicle. The temperature within a populated fuse box (in a given location) will be higher. The limiting factor is the plating. Sn-plating's temperature limit is =130°C, and Ag-plating allows up to 150°C at the terminal interface.

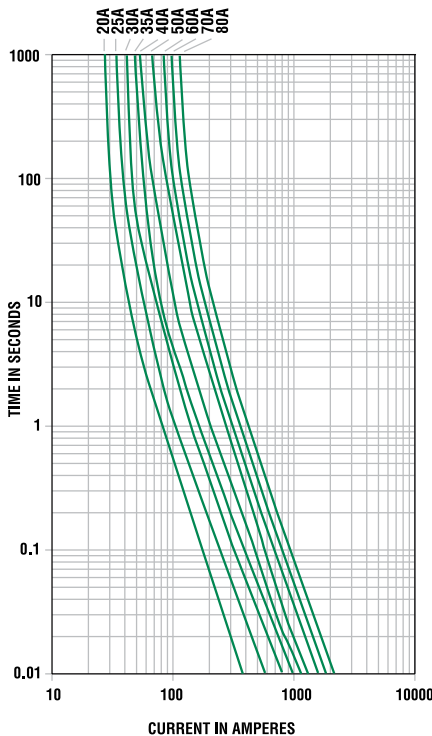


MAXI Blade Fuses



MAXI Sn Fuse (tin plated)

Time-Current Characteristic Curves



Component Level Temperature** = the maximum ambient temperature that a single fuse will survive. This does not factor in the heat from a populated fuse box, but does include the heat from the current load with the proper rerating. *System Level Temperature** represents the ambient temperature of the fuse box at a location within the vehicle. The temperature within a populated fuse box (in a given location) will be higher. The limiting factor is the plating. Sn-plating's temperature limit is ~130°C, and Ag-plating allows up to 150°C at the terminal interface.

MAXI Blade Fuses Rated 32V

The MAXI® fuse uses "Diffusion Pill Technology" to provide predictable time delay characteristics and low heat dissipation.

Specification

	MAXI (Silver Plated)	MAXI Sn (Tin Plated)
Voltage Rating:	32 VDC/32 VDC	
Interrupting Ratings:	1000A @ 32 VDC	1000A @ 32 VDC
*Component Level Temperature Range:	-40°C to +125°C	-40°C to +105°C
**System Level Temperature Range:	-40°C to +105°C	-40°C to +85°C
	<i>105°C and 85°C are typical system level temperature requirements.</i>	
Terminals:	Ag plated zinc alloy	Sn plated zinc alloy
Housing Material:	PA66 PA66	
Complies with:	SAE J 1888, SAE 2576, ISO 8820-3:2002(E)	SAE J 1888, SAE 2576, ISO 8820-3:2002(E)



Ordering Information

Part Number	Package Size
0299xxx.ZXNV	1200
0299xxx.L	50
0299xxx.TXN	10
MAXI Sn Fuse	
0299xxx.ZXT	1200

Time-Current Characteristics

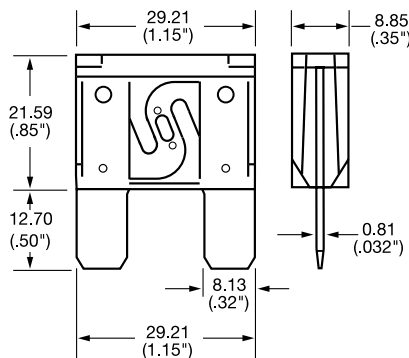
% of Rating	Opening Time Min / Max (s)
100	360,000 s / -
135	60 s / 1,800 s
200	2 s / 60 s
350	0.20 s / 7 s
600	0.040 s / 1 s

Ratings

Part Number	Current Rating (A)	Housing Material Color	Typ. Voltage Drop (mV)	Cold Resistance (mΩ)	I ² t (A ² s)
0299020_	20	Yellow	76	3.10	1100
0299025_	25	Grey	75	2.39	2087
0299030_	30	Green	77	1.95	4070
0299035_	35	Brown	75	1.71	6032
0299040_	40	Orange	75	1.42	8450
0299050_	50	Red	73	1.10	11300
0299060_	60	Blue	77	0.89	15300
0299070_	70	Tan	61	0.64	21200
0299080_	80	Light Orange	62	0.54	43600

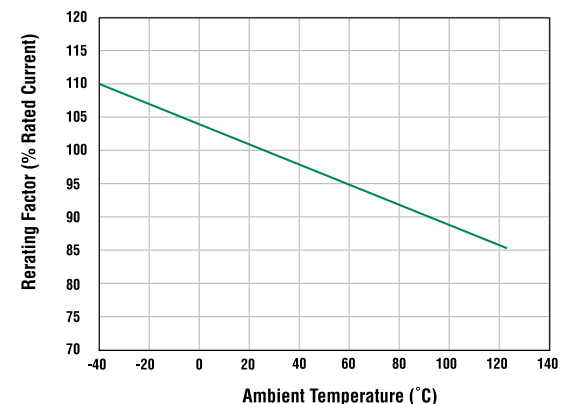
Dimensions

Dimensions in mm



Temperature Rerating Curve

MAXI Fuse Temperature Rerating Curve



Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.



MAXI Blade Fuses

MAXI Blade Fuses Rated 58V

The MAXI® style fuse for use in 42V Systems. Same Time-Current characteristic as the 32V MAXI fuse using "Diffusion Pill Technology" to provide predictable time delay characteristics and low heat dissipation. Fits into standard MAXI® fuse sockets. Has a rejection feature to prevent fuses with lower voltage rating from being wrongfully inserted into the circuit. Current rating 20A - 80A @58 VDC max.

Specifications

Voltage Rating:	58 VDC
Interrupting Ratings:	1000A @ 58 VDC
*Component Level Temperature Range:	-40°C to +125°C
**System Level Temperature Range:	-40°C to +105°C
<i>105°C is a typical system level temperature requirement.</i>	
Terminals:	Ag plated zinc alloy
Housing Material:	PA66
Complies with:	SAE J 1888, SAE 2576 ISO 8820-3:2002(E)



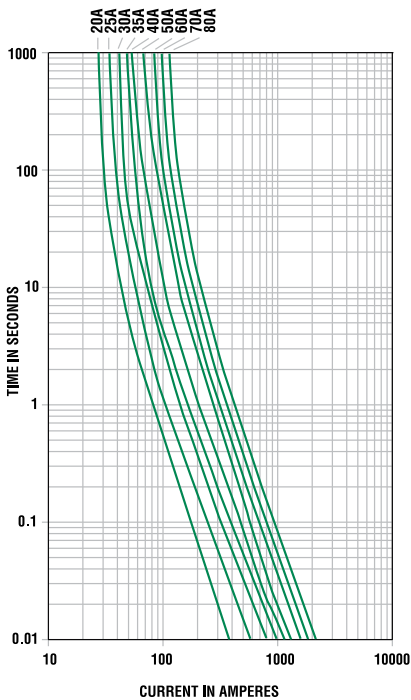
Ordering Information

Part Number	Package Size
0999xxx.ZXN	1200

Time-Current Characteristics

% of Rating	Opening Time Min / Max (s)
100	360,000 s / -
135	60 s / 1,800 s
200	2 s / 60 s
350	0.20 s / 7 s
600	0.040 s / 1 s

Time-Current Characteristic Curves



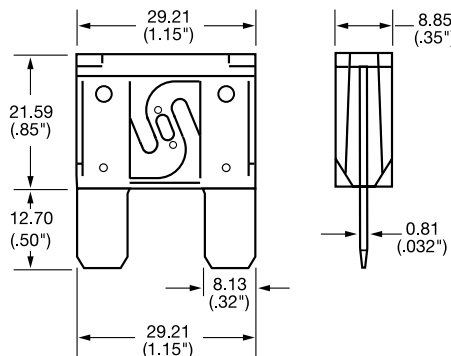
***Component Level Temperature** = the maximum ambient temperature that a single fuse will survive. This does not factor-in the heat from a populated fuse box, but does include the heat from the current load with the proper rerating.
****System Level Temperature** represents the ambient temperature of the fuse box at a location within the vehicle. The temperature within a populated fuse box (in a given location) will be higher. The limiting factor is the plating. Sn-plating's temperature limit is ~130°C, and Ag-plating allows up to 150°C at the terminal interface.

Ratings

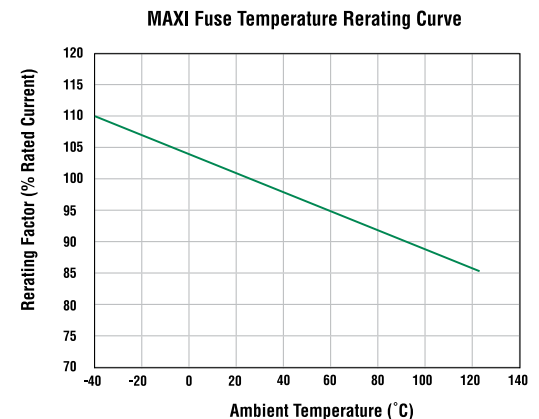
Part Number	Current Rating (A)	Housing Material Color	Typ. Voltage Drop (mV)	Cold Resistance (mΩ)	I ² t (A ² s)
0999020_	20	Yellow	76	3.10	1100
0999025_	25	Grey	75	2.39	2087
0999030_	30	Green	77	1.95	4070
0999035_	35	Brown	75	1.71	6032
0999040_	40	Orange	75	1.42	8450
0999050_	50	Red	73	1.10	11300
0999060_	60	Blue	77	0.89	15300
0999070_	70	Tan	61	0.64	21200
0999080_	80	Light Orange	62	0.54	43600

Dimensions

Dimensions in mm



Temperature Rerating Curve



Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.

Cartridge Fuses

MCASE+ Cartridge Fuses Rated 32V	11
MCASE™ Cartridge Fuses Rated 32V	13
Low Profile JCASE® Fuse Rated 58V	14
JCASE® Fuse Rated 32V	15





MCASE+™ Cartridge Fuses

MCASE+™ Cartridge Fuses Rated 32V

The Unslotted MCASE+™ Fuse is a cartridge style fuse up to 40A with female terminals for 2.8 mm male terminals. The Slotted MCASE+™ Fuse is available in amperages up to 60A and can mate with larger male terminals (e.g., 6.3mm) or even mount directly to onto a busbar. It has a miniaturized footprint for optimal usage of space. It is a time delayed fuse and can handle inrush currents.

Specifications

Voltage Rating:	32 VDC
Interrupting Ratings:	1000A @ 32 VDC
Operating Temperature Range:	-40°C to +125°C
Housing Material:	PPA-GF33
Cover Material:	PA66
Fuse Insertion Force:	50N (11.2lbf) Typical
Extraction Force:	4N Min. (0.9 lb). 24.5N Max. (5.5 lb)
Conforms to:	SAE 2741 and ISO 8820-4 in reference to electrical, mechanical and environmental performance requirements

Ordering Information

Part Number	Package Size
0695xxx.PXPS Slotted	2000
0695xxx.PXP Unslotted	2000

Time-Current Characteristics

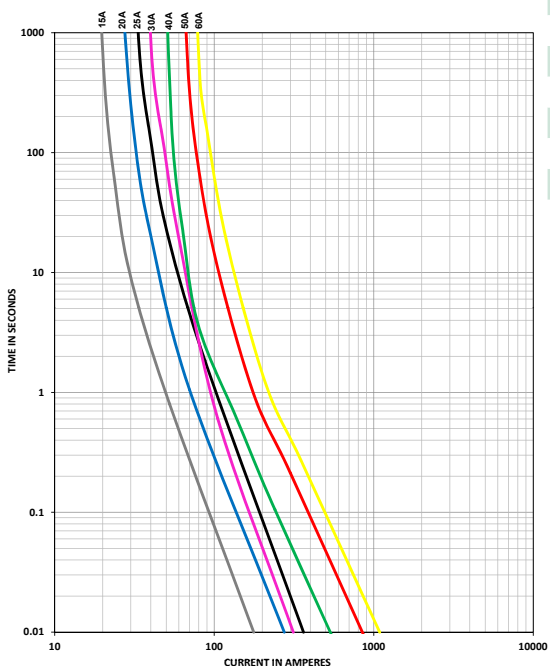
% of Rating	Opening Time Min / Max
110	100hrs / –
135	60s / 1800s
200	2s / 60s
350	0.2s / 7s
600	0.04s / 1s

Ratings

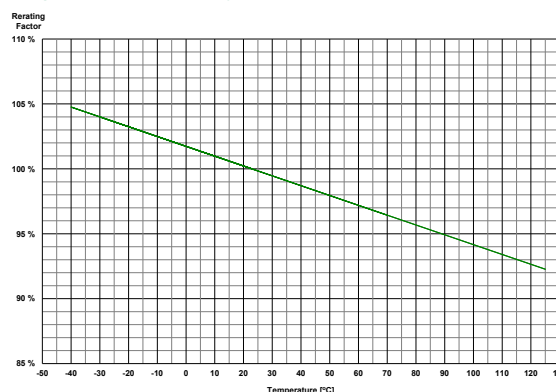
Part Number	Type	Current Rating* (A)	Housing Material Color	Max. Voltage Drop (mV)	Cold Resistance (mΩ)	I ² t (A ² s)
0695015.PXP	Unslotted	15	Grey	125	5.1	310
0695020.PXP	Unslotted	20	Blue	125	3.4	750
0695025.PXP	Unslotted	25	Orange	125	2.5	1300
0695030.PXP	Unslotted	30	Pink	120	1.8	970
0695040.PXP	Unslotted	40	Green	120	1	1550
0695015.PXPS	Slotted	15	Grey	125	5.1	310
0695020.PXPS	Slotted	20	Blue	125	3.4	750
0695025.PXPS	Slotted	25	Orange	125	2.5	1300
0695030.PXPS	Slotted	30	Pink	120	1.8	970
0695040.PXPS	Slotted	40	Green	120	1.1	1550
0695050.PXPS	Slotted	50	Red	120	0.8	4000
0695060.PXPS	Slotted	60	Yellow	120	0.6	8500

* The performance of the male terminal is critical to ensuring the fuse will function as designed. The current-carrying capability of the mating terminal must be verified to ensure proper system operation.

Time-Current Characteristic Curves



Temperature Rerating Curve



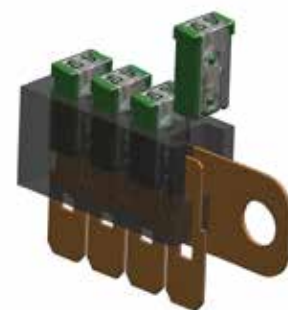
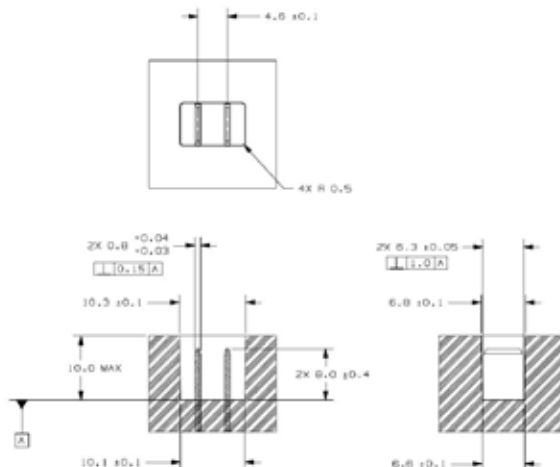
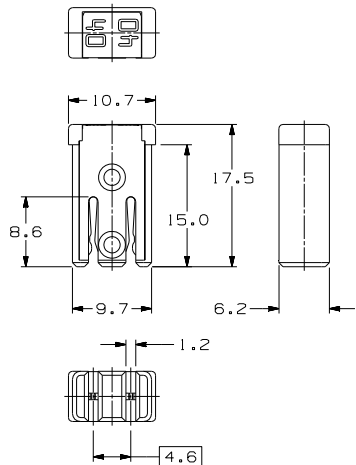
Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.

MCASE+™ Cartridge Fuses Rated 32V

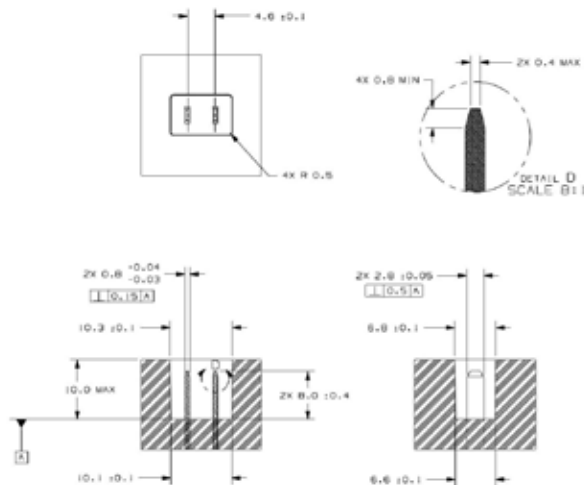
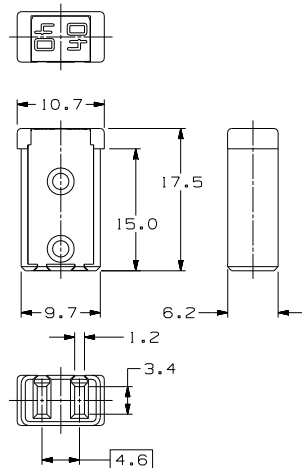
Dimensions

Dimensions in mm

Slotted



Unslotted



Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.



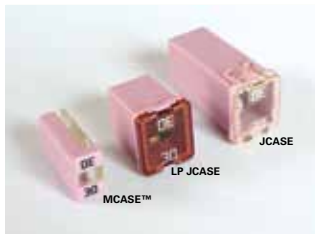
MCASE™ Cartridge Fuses

MCASE™ Cartridge Fuses Rated 32V

The MCASE™ is a cartridge style fuse with female terminals for 2.8 mm male terminals. It has a miniaturized footprint for optimal usage of space. It is a time delayed fuse and can handle in rush currents.

Specifications

Voltage Rating:	32 VDC
Interrupting Ratings:	1000A @ 32 VDC
Operating Temperature Range:	-40°C to +125°C
Housing Material:	PPA-GF33
Cover Material:	PA66
Insertion Force:	50N (11.2lbf) Typical
Extraction Force:	4N Min. (0.9 lb) 24.5N Max. (5.5 lb)
Conforms to:	SAE 2741 and ISO 8820-4 in reference to electrical, mechanical and environmental performance requirements



Ordering Information

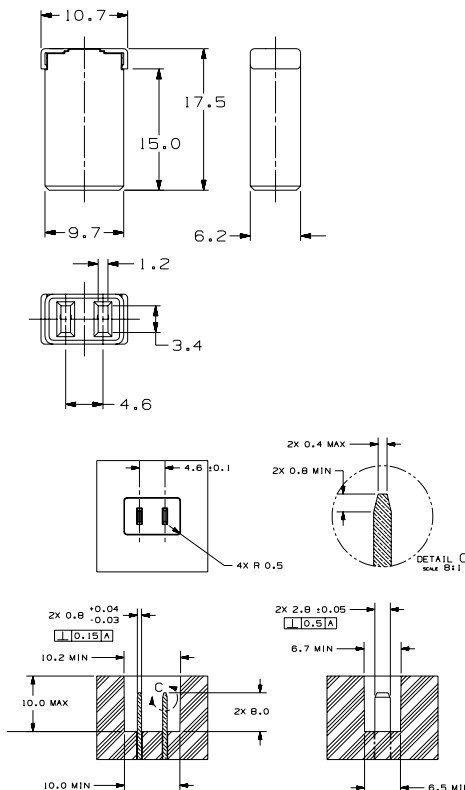
Part Number	Package Size
0695xxx.PX4	2000
0695xxx.U	500
0695xxx.L	50

Time-Current Characteristics

% of Rating	Opening Time Min / Max (s)
110	100 hrs / -
135	60 s / 1800 s
200	2 s / 60 s
350	0.2 s / 7 s
600	0.04 s / 1 s

Dimensions

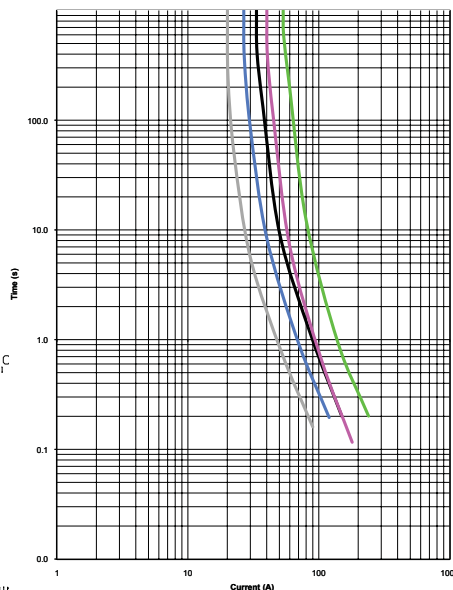
Dimensions in mm



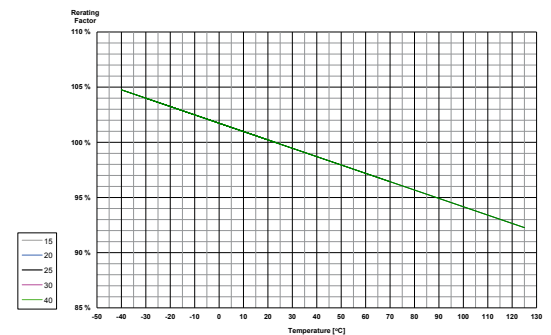
Ratings

Part Number	Current Rating (A)	Housing Material Color	Max. Voltage Drop (mV)	Cold Resistance (mΩ)	I ² t (A ² s)
0695015_	15	Grey	125	4.9	160
0695020_	20	Blue	125	3.5	530
0695025_	25	Orange	125	2.3	1140
0695030_	30	Purple	120	1.8	970
0695040_	40	Green	120	1.3	2950

Time-Current Characteristic Curves



Temperature Derating Curve



Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.



Low Profile JCASE®
Cartridge Fuses

Low Profile JCASE® Cartridge Fuses Rated 58V

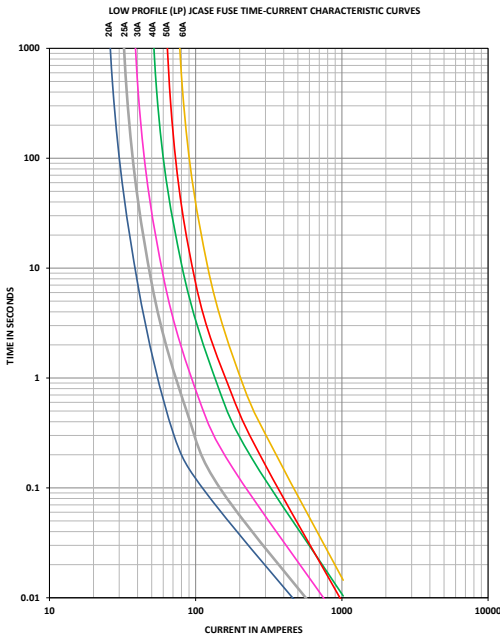
The Low Profile JCASE® fuse has similar performance characteristics as the standard JCASE® fuse. The lower overall height reduction allows for more space and weight savings and also allows for a shorter male blade terminal, saving additional weight and material savings in fuse box designs.

Specifications

Voltage Rating:	58 VDC
Interrupting Rating:	1000A @ 58 VDC
Operating Temperature Range:	-40°C to + 125°C
Housing Material:	PPA-GF13
Cover Material:	PA66
Insertion Force:	53N Max. (12 lb.)
Extraction Force:	9N Min (2 lb.)
Conforms to:	SAE 2741 and ISO 8820-4 except for the life test – LF specification is 100-hours at 100% of rated current

RoHS

Time-Current Characteristic Curves



Ordering Information

Part Number	Package Size
0895xxx.Z	2000
0895xxx.U	500
0895xxx.T	10

Time-Current Characteristics

% of Rating	Opening Time Min / Max (s)
100	360,000 s / -
135	60 s / 1800 s
200	4 s / 60 s
350	0.200 s / 7 s
600	0.040 s / 1 s

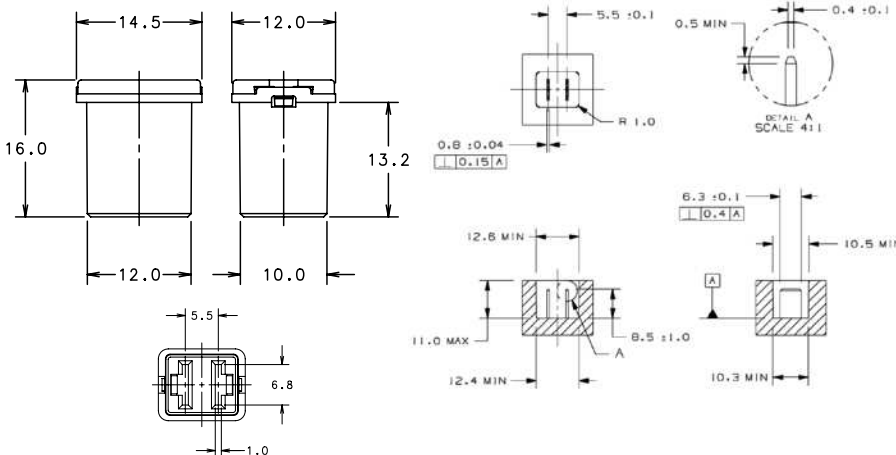
Ratings

Part Number	Current Rating (A)	Housing Material Color	Max. Voltage Drop (mV)	Cold Resistance (mΩ)	I²t (A²s)
0895020_	20	Blue	125	4.48	400
0895025_	25	White	125	3.39	680
0895030_	30	Pink	125	2.68	1780
0895040_	40	Green	125	1.89	5470
0895050_	50	Red	125	1.08	4880
0895060_	60	Yellow	125	0.83	9600

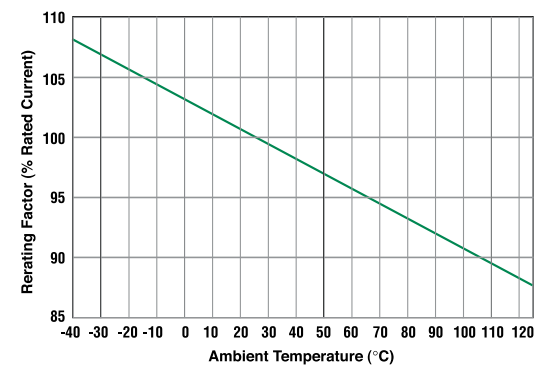
Corresponding holder see Section "Fuse Holders."

Dimensions

Dimensions in mm



Temperature Derating Curve



Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.



JCASE®
Cartridge Fuses

JCASE® Cartridge Fuses Rated 32V

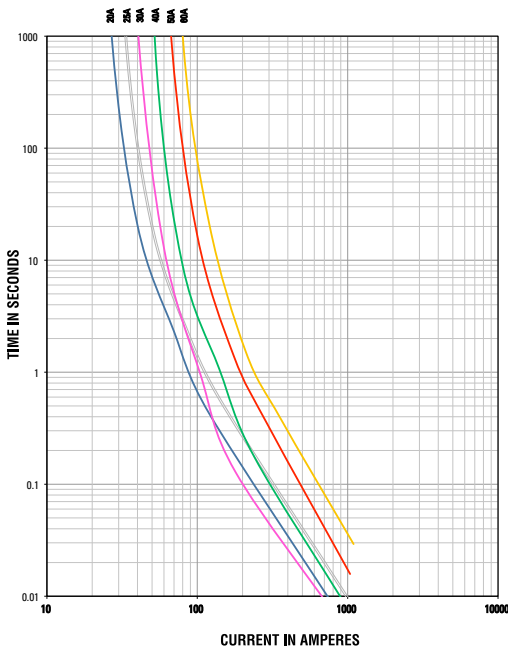
The JCASE® is a cartridge style fuse with female terminal design. JCASE® provides both increased time delay and low voltage drop to protect high current circuits. JCASE® has the ability to handle inrush currents.

Specifications

Voltage Rating:	32 VDC
Interrupting Rating:	1000A @ 32 VDC
Operating Temperature Range:	-40°C to + 125°C
Housing Material:	PA-GF13HS
Housing Material (60A):	PA-GF13
Cover Material:	PC
Insertion Force:	53N max. (12 lb.)
Extraction Force:	9N min. (2 lb.)
Complies with:	SAE 2741, ISO 8820-4



Time-Current Characteristic Curves



Ordering Information

Part Number	Package Size	% of Rating	Opening Time Min / Max (s)
0495xxx.ZXA	2200	110	360,000 s / -
0495xxx.UXA	500	135	60 s / 1800 s
0495xxx.TXA	10	200	4 s / 60 s
		350	0.200 s / 7 s
		600	0.040 s / 1 s

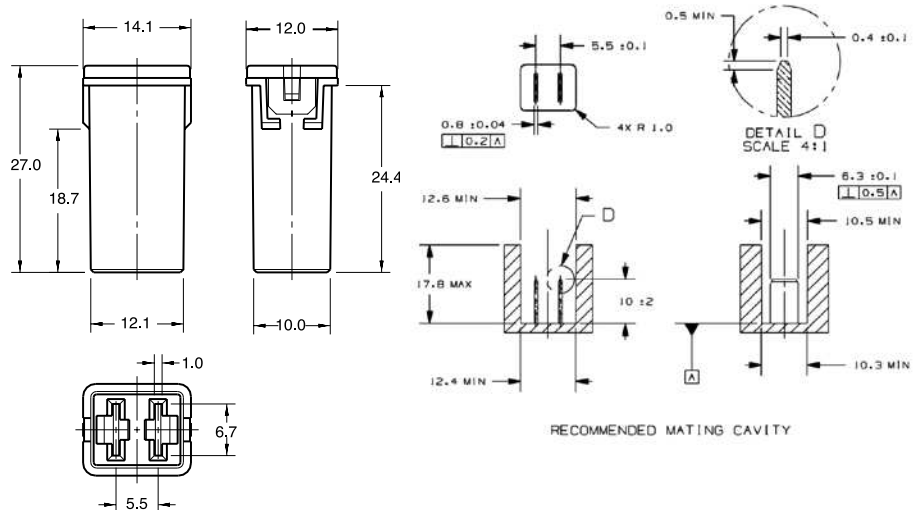
Time-Current Characteristics

Ratings

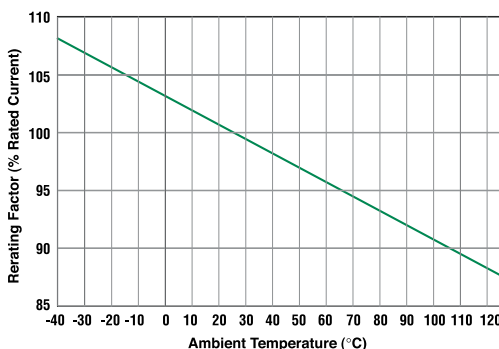
Part Number	Current Rating (A)	Housing Material Color	Typ. Voltage Drop (mV)	Cold Resistance (mΩ)	I ² t (A ² s)
0495020_	20	Blue	106	4.29	1750
0495025_	25	White	101	3.28	3220
0495030_	30	Pink	91	2.12	1480
0495040_	40	Green	87	1.30	3650
0495050_	50	Red	88	0.99	8750
0495060_	60	Yellow	87	0.76	19500

Dimensions

Dimensions in mm



Temperature Derating Curve



Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.

High Current Fuses

ZCase Masterfuse	17
Masterfuse	18
ZCase Single Starter	19
MEGA® High Performance Fuse Rated 70V	21
MEGA® Fuse Rated 32V	22
MEGA® Low Temperature Fuse Rated 32V	24
UL Recognized Mega® Fuse Rated 32V	25
MIDI® Style Bolt-down Fuse Rated 32V	26
BF1 Fuse Rated 32V	28
BF1 Fuse Rated 58V	30
BF2 Fuse Rated 32V	31
BF2 Fuse Rated 58V	32
CF Fuse Rated 58V	33
Fuse Strips	34





ZCASE Masterfuses

ZCASE Masterfuse

The ZCASE Masterfuse product is the smallest high current distribution product in the industry. It utilizes the Z-Axis effectively to create a compact design which takes one third the footprint of a traditional solution. This package allows the user to replace multiple discrete fuses in a power distribution box with a single component, thus eliminating additional bolts, bus bars and interconnects. The output bolt is integrated into the fuse creating a reliable interface to the mating terminal due to its high torque withstandability. Keying features are available on each bolt position to ensure the correct mating ring terminal is used during assembly. The solution can also be connectorized to mate to high current terminals. This compact design enables the integration of the high current distribution into the main junction box due to its small footprint. This eliminates the need for a separate fuse box for high current distribution. By reducing the number of components required, overall system costs are reduced.

The ZCASE Masterfuse product is available as a standard design with customized fuse ratings. The modular manufacturing approach enables a wide range of configurations within a product family. In addition, the form factor can be fully customized for specific applications to further optimize the system. Contact Littelfuse to review your application needs.

Features and Benefits:

Miniaturization: Compact design enables a 2/3 footprint reduction when compared to a traditional solution.

Integration: Enables the integration of the prefuse function into the main junction box due to its small footprint.

Specifications

Mating Terminal Options:	M10, M8, M6, M5 bolt-down connections or female terminals
Operating Temperature Range:	-40°C to 125°C
Housing Material:	PPA-GF33HS
Fuse Ratings Available:	30-500A
Voltage Rating:	32Vdc
Materials:	Copper terminals (silver or tin plating options available)
Complies with:	ISO 8820-5

RoHS

Ordering Information

Part Number	Description	Package Size
05980015Z-CN	MFUSE ZCASE 32V 2-Way 125A - 200A	200
05980016Z-CN	MFUSE ZCASE 32V 2-Way 125A - 125A	200
05980017Z-CN	MFUSE ZCASE 32V 2-Way 275A - 200A	200
05980019Z	MFUSE ZCASE 32V 1-MEGA + 4-MIDI	100
05980020Z	MFUSE ZCASE 32V 2-MEGA + 2-MIDI	50

MASTERFUSE

The MASTERFUSE product is a configurable fuse solution combining several different fuse types (i.e. MEGA and MIDI) and ratings in one compact package. This fuse package allows the user to replace multiple discrete fuses in a power distribution box with a single component, thus eliminating additional bolts, bus bars, and interconnects that are currently used. By reducing the number of connections required, overall system reliability is increased while cost is decreased.

Each MASTERFUSE is customized to the user's application creating an optimized circuit protection package. Contact Littelfuse to review your application needs.

Features and Benefits:

- Increased Reliability:** due to reduced number of terminal interfaces
- System Cost Savings:** Material savings due to reduced number of components required. Assembly cost savings due to reduced number of operations required for installation.
- Fuse Array Customization:** Ability to mix different fuse types (i.e. MEGA, MIDI, etc.) in one compact package
- Termination Options:** Ability to mate to female terminals to enable "bolt-less" design
- Marking:** Custom marking options available

Specifications

- Mating Terminal Options: M10, M8, M6, M5 bolt-down connections or female terminals
 - Operating Temperature Range: -40°C to 125°C
 - Housing Material: PPA-GF33HS
 - Fuse Ratings Available: 30A-250A Full Range
300A-600A Short Circuit
 - Voltage Rating: 32Vdc
 - Materials: Copper terminals (silver or tin plating options available)
 - Complies with: ISO 8820-5
- Note: Short circuit protected fuses have a limited continuous current.



Masterfuses





ZCASE Single Mega/Starter Fuse

ZCASE Single MEGA/Starter Fuse

The Single ZCASE is a Minimal Footprint Bolt Down Fuse with a wide rating range up to 600A in the same packaging size. The Time Current characteristic is similar to the well known MEGA Design and can be used as full wire protection until 250A. Higher ratings are mostly used for typically Starter Fuse applications as a protector fuse. The fuse design is optimized for a one bolt connection M6 (40A - 250A) or M8 (300A - 600A) and can be used directly on a battery post or busbar connection. Littelfuse is offering a complete solution for the necessary stud and different busbar connections including some battery clamps.

Specifications

Operating temperature:	-40 to 125°C
Housing Material:	PPA-GF33HS
Insulating Tube:	Out of ceramic
Terminal:	Tin plated Copper
Voltage Rating:	32V DC
Interrupting Rating:	2000A @ 32V VDC
Mounting Torque M6:	9.8Nm±1.4Nm
Mounting Torque M8:	14Nm±2Nm

Ordering Information

Part Number	Package Size
3298XXX.ZXSTA	480
3298XXX.Z	480
3298XXX.H	100

Time-Current Characteristics

% of Rating	Opening Time Min / Max (s)		
	40A - 250A	300A - 500A	600A
50	- / -	14,400 / -	14,400 / -
100	14,400 / -	- / -	- / -
135	120 / 1800	- / -	- / -
200	1 / 15	1 / 40	1 / 40
350	0.300 / 5	0.300 / 5	0.300 / 5
500	- / -	- / -	0.100 / 1
600	0.100 / 1	0.100 / 1	- / -

Ratings

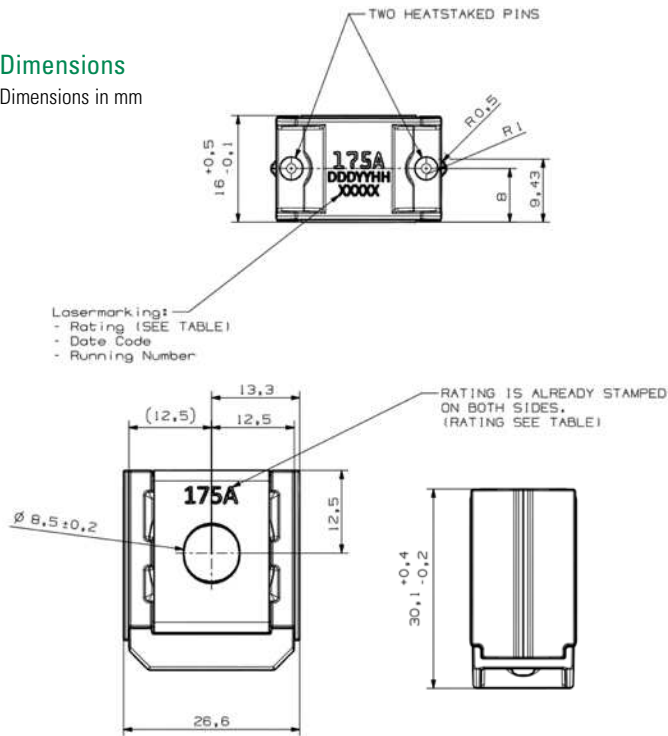
Part number	Current Rating (A)	Wire size (mm ²)	Max. Voltage Drop (mV)	Average Cold Resistance (mΩ)	I ² t (A ² s)
3298040_	40	4	110	1.53	5000
3298060_	60	6	110	0.98	18000
3298080_	80	10	110	0.715	15500
3298100_	100	16	110	0.57	31000
3298125_	125	16	110	0.39	45000
3298150_	150	25	110	0.32	75000
3298175_	175	25	110	0.26	140000
3298200_	200	35	110	0.231	235000
3298225_	225	35	110	0.175	95000
3298250_	250	50	110	0.167	160000
3298300.ZXSTA	300	35	70	0.128	310000
3298350.ZXSTA	350	35	70	0.103	570000
3298400.ZXSTA	400	50	70	0.084	870000
3298500.ZXSTA	500	50	70	0.065	1550000
3298600.ZXSTA	600	50	70	0.049	3000000
3298900_	SHUNT	50	-	-	-

Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.

ZCASE Single Mega/Starter Fuse

Dimensions

Dimensions in mm



Assembly Components (sold separately)

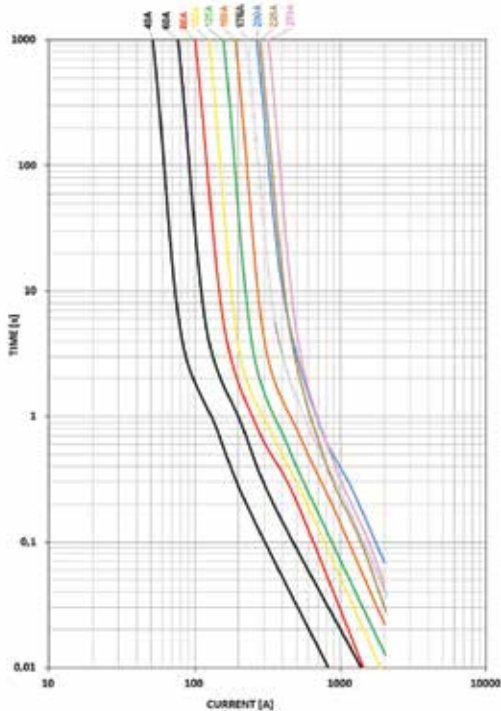
Part No.	Description
882-853	3-Way Bus Bar with M8 Insulating Bolts Assembly*
882-854	2-Way Bus Bar with M8 Insulating Bolts Assembly* *M8 Nuts not included
876-199	Battery Terminal Mount
32980001ZXM8	M8 Insulating Bolt



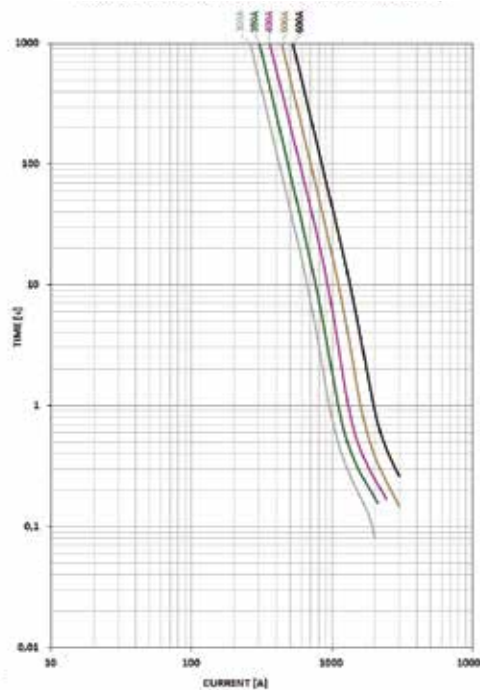
Please contact your Littelfuse representative for application support and information on mating hardware.

Time-Current Characteristic Curves

Reference Time-Current Characteristic Curves (Recorded@23°)



Reference Time-Current Characteristic Curves (Recorded@23°)



All ZCASE Starters T/C curves were performed on the left or right side of the metal bar as shown in pictures above. A 50mm² Cu wire was mounted at the mid hole (M8) of the metal bar as current feed.

MEGA® High Performance Fuse Rated 70V

The MEGA® 70V High Performance (HP) Fuse is designed for high current circuit protection up to 500A with "Diffusion Pill Technology." The MEGA 70V HP features 1MΩ Open State Resistance after fuse opening to guarantee safe interruption at any voltage up to 70V. The MEGA® 70V HP Fuse is ideal for battery and alternator protection application and other heavy gauge cables requiring ultra-high current protection.



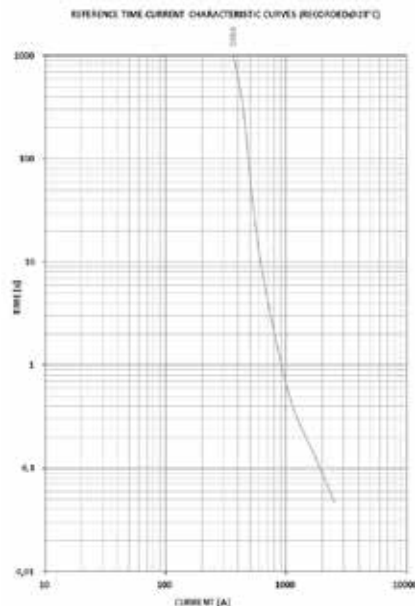
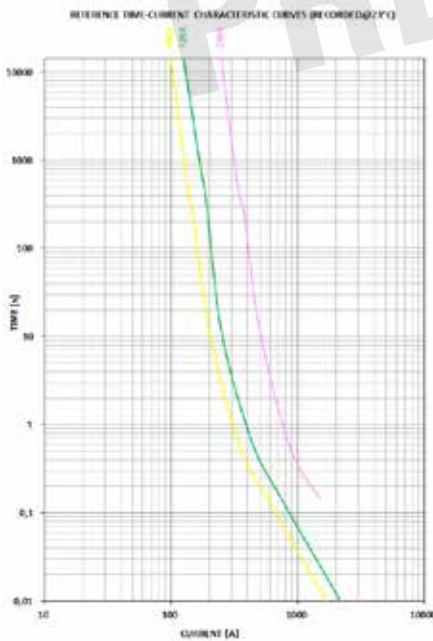
MEGA® 70V HP Fuse

Specifications

Interrupting Rating:	2500A @ 70 VDC
Voltage Rating:	70 VDC
Operating Temperature Range:	-40°C to + 125°C
Housing Material:	PPA-GF33
Terminals:	ETP Copper (Tin plated)
Mounting Torque:	20Nm+/-1Nm
Open State Resistance (after fuse opening)	>1MΩ
Reference to:	ISO 20934 - Type SF51 (draft), LV 230



Time-Current Characteristic Curves



Ordering Information

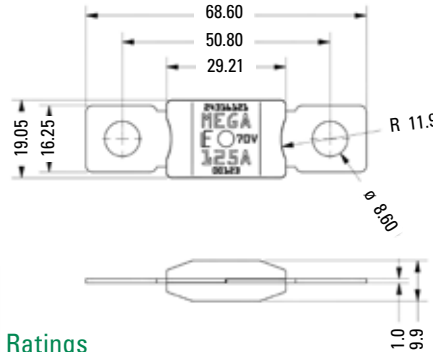
Part Number	Package Size	Rating	Bolt Size	Bolt Hole Qty
0998xxx.U-2M8	---	60 - 500	M8	2
0998xxx.U-1M8	---	60 - 500	M8	1
0998xxx.U-2M6	---	60 - 500	M6	2
0998xxx.U-1M6	---	60 - 500	M6	1
0998xxx.U-NH	---	60 - 500	N/A	0

Time-Current Characteristics

Rating (A)	% of Rating	Opening Time Min (s)	Opening Time Max (s)
300-500	75	14400	--
60-250	100	14400	--
300-500	135	--	--
60-250		120	1800
300-500	150	--	--
60-250		20	450
300-500	200	1	15
60-250		1	15
300-500	350	0.5	5
60-250		0.3	5
300-500	600	--	--
60-250		0.1	1

Dimensions

Dimensions in mm



Ratings

Part Number	Current Rating (A)	Rated Voltage (V)	Voltage Drop (mV) max.	Wire (mm²)	I²t (A²s)
0998060_	60	70	110	6	25000
0998080_	80	70	110	10	46000
0998100_	100	70	110	10	23000
0998125_	125	70	110	16	43000
0998150_	150	70	110	25	72000
0998175_	175	70	110	25	112000
0998200_	200	70	110	35	193000
0998225_	225	70	110	35	250000
0998250_	250	70	110	50	240000
0998300_	300	70	80	50	300000
0998350_	350	70	80	50	590000
0998400_	400	70	80	70	950000
0998450_	450	70	80	70	1250000
0998500_	500	70	80	70	1750000

Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.