

# MCASE+™ Cartridge Fuses

Rated 32V

RoHS

## Specifications

<b>Voltage Rating:</b>	32 V dc
<b>Interrupting Rating:</b>	1000A @ 32 V dc
<b>Recommended Environmental Temperature:</b>	-40 °C to +125 °C
<b>Housing Material:</b>	PPA-GF33 (U.L. 94 Flammability rating - HB)
<b>Cover Material:</b>	PA66 (U.L. 94 Flammability rating - V2)
<b>Net Weight per Fuse:</b>	1.15 g ± 10%
<b>Fuse Insertion Force:</b>	50N (11.2 lb) - Typical
<b>Extraction Force:</b>	4N Min. (0.9 lb) / 24.5N Max (5.5 lb) - Single Terminal
<b>Complies with:</b>	SAE 2741 and ISO 8820-4 in reference to electrical, mechanical and environmental performance requirements.



## Features & Benefits

- Color coding shows the amperage rating for each fuse
- Semitransparent cover makes it easier to see when fuse blows
- Slotted fuses can mount on busbars
- High-contrast amperage stamp on the top of the housing aids identification
- High Temperature fuses clearly labeled “HT”

## Applications

- Cars
- Trucks
- SUVs
- Offroad vehicles
- Buses
- Watercraft as approved by Littelfuse®

## Description

MCASE+™ cartridge fuses protect automotive circuits from inrushes of current while taking up minimal space. Unslotted MCASE+ fuses mount on 2.8 mm terminals, and Slotted MCASE+ fuses can mount on busbars or 6.3 mm terminals. MCASE+ High Temperature fuses produce a lower voltage drop and experience a lower temperature rise when subjected to harsher conditions.

Note that the current carrying capability of the mating terminal must be verified to ensure proper system operation. Please contact Littelfuse for details regarding the test setup definition, which refers to ISO 8820-4 (Plated Mating Tab Terminals).

## Ordering Information

Part Number	Type	Rating	Package Size
0695xxx.PXPS	Slotted	15–60	2000
0695xxx.PXPS-HT	Slotted	40–60	2000
0695xxx.PXP	Unslotted	15–40	2000
0695xxx.PXP-HT	Unslotted	40	2000



**Recommended MCASE Fuse Puller**  
MATERIAL NUMBER 00970054XPA

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### Ratings

Part Number	Type	Current Rating (A)	Housing Material Color	Test Cable Size (mm <sup>2</sup> )	Typ. Voltage Drop (mV)	Typ. Cold Resistance (mΩ)	Typ. I <sup>2</sup> t (A <sup>2</sup> s)
0695015.PXPS	Slotted	15	Grey	1.25	97	4.8	295
0695020.PXPS	Slotted	20	Blue	1.25	100	3.4	570
0695025.PXPS	Slotted	25	Orange	2	99	2.5	1370
0695030.PXPS	Slotted	30	Pink	2	112	1.8	1030
0695040.PXPS	Slotted	40	Green	3	107	1.1	1400
0695050.PXPS	Slotted	50	Red	5	109	0.77	3800
0695060.PXPS	Slotted	60	Yellow	5	102	0.54	8000
0695040.PXPS-HT	Slotted	40	Green	3	111	0.89	2500
0695050.PXPS-HT	Slotted	50	Red	5	74	0.64	5700
0695060.PXPS-HT	Slotted	60	Yellow	5	90	0.46	13 000
0695015.PXP	Unslotted	15	Grey	1.25	97	4.8	300
0695020.PXP	Unslotted	20	Blue	1.25	106	3.4	600
0695025.PXP	Unslotted	25	Orange	2	114	2.5	1200
0695030.PXP	Unslotted	30	Pink	2	96	1.8	1000
0695040.PXP	Unslotted	40	Green	3	101	1	1700
0695040.PXP-HT	Unslotted	40	Green	3	109	0.89	2500

Please Note: 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. Fixture Test Set Up Refer To ISO 8820 4 (Plated Mating Tab Terminals). Please contact Littelfuse® for details regarding Test Set Up Definition.

The typical I<sup>2</sup>t is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs.

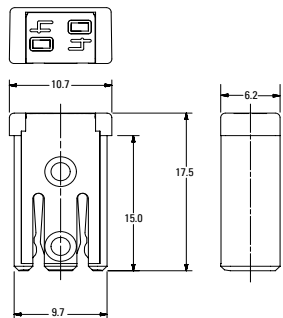
# MCASE+™ Cartridge Fuses

Rated 32V

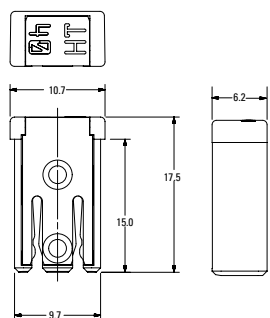
## Dimensions

Dimensions in mm for reference only.  
See outline drawing for dimensions and tolerances.

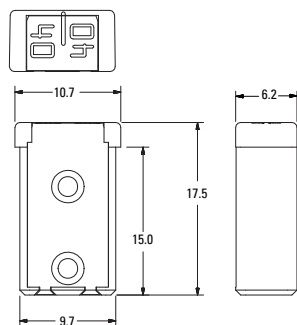
### MCASE+™ Slotted



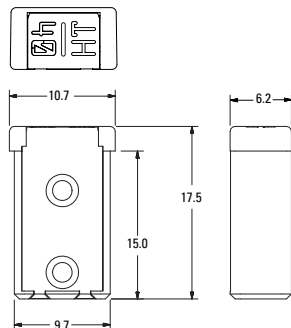
### MCASE+™ Slotted HT



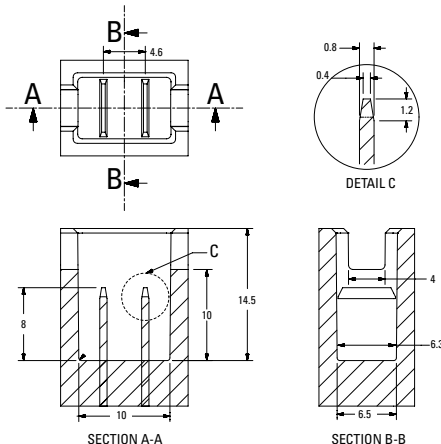
### MCASE+™ Unslotted



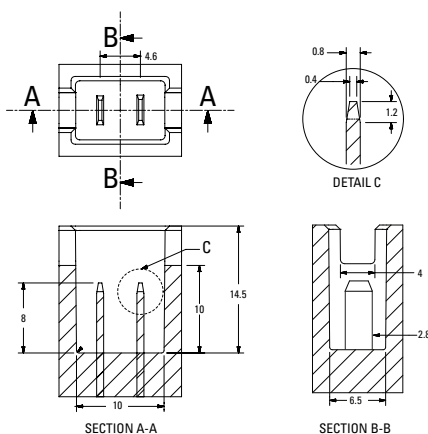
### MCASE+™ Unslotted HT



## Slotted Recommended Mating Cavity



## Unslotted Recommended Mating Cavity

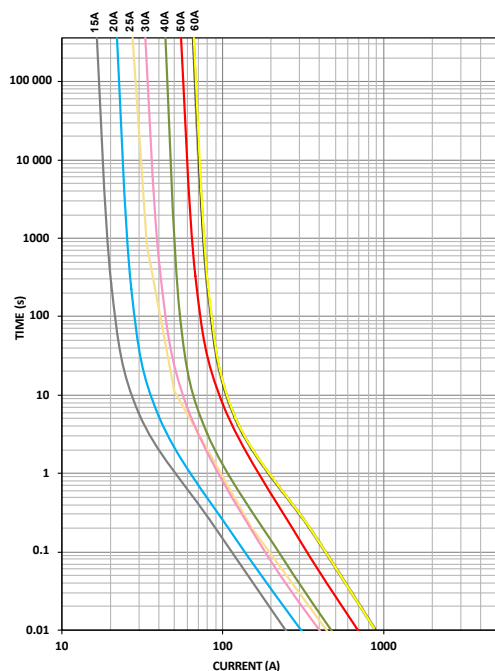


# MCASE+™ Cartridge Fuses

## Rated 32V

### MCASE+™ Slotted

#### Time-Current Characteristic Curves

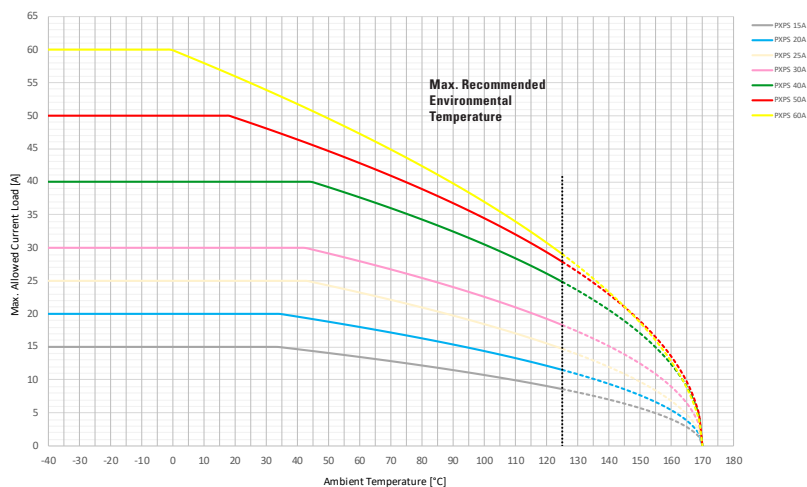


#### Time-Current Characteristics

% of Rating	Opening Time Min / Max (s)
110	360 000 / ∞
135	60 / 1800
200	2 / 60
350	0.2 / 7
600	0.04 / 1

#### Typical Derating of Fuse Melting Element

Temperature Security Margin is 20%  
 Wire Cross Section And Fixture Test Set Up Refer To ISO 8820-3  
 Please Contact Littelfuse® For Details Regarding Derating Test Set Up



#### Temperature Table

	Max. allowed current load (A) at ambient temperature (typical derating)						
	-40 °C	0 °C	20 °C	65 °C	85 °C	110 °C	125 °C
<b>15A</b>	15	15	15	13	12	10	9
<b>20A</b>	20	20	20	18	16	13	12
<b>25A</b>	25	25	25	23	20	17	15
<b>30A</b>	30	30	30	27	25	21	18
<b>40A</b>	40	40	40	37	33	28	25
<b>50A</b>	50	50	50	42	38	32	28
<b>60A</b>	60	60	56	46	41	34	29

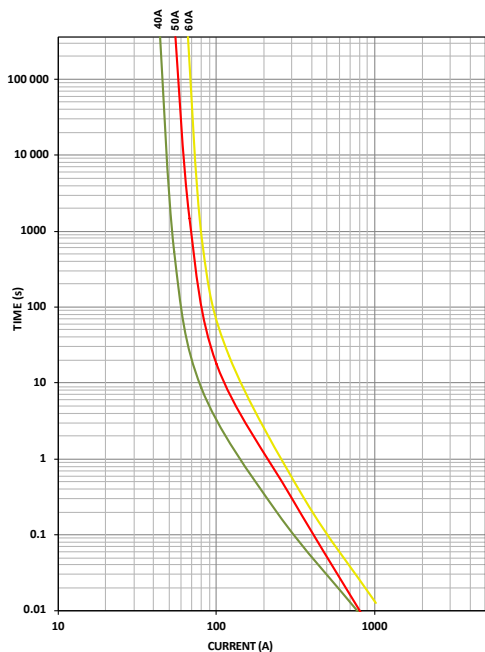
Derating curves may change depending on the final condition of the application (terminals characteristics, wire size etc.). Please ask Littelfuse for more information.

# MCASE+™ Cartridge Fuses

## Rated 32V

### MCASE+™ Slotted HT

#### Time-Current Characteristic Curves

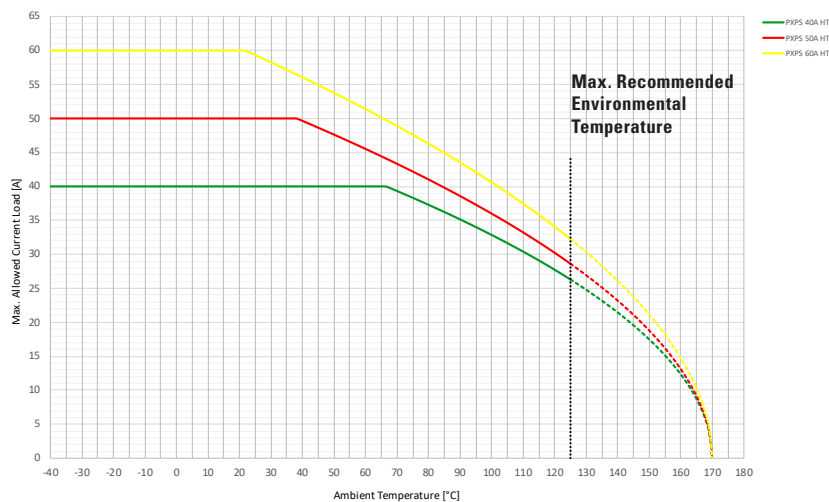


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40A HT	40	40	40	40	36	30	26
50A HT	50	50	50	44	40	33	29
60A HT	60	60	60	50	45	37	32

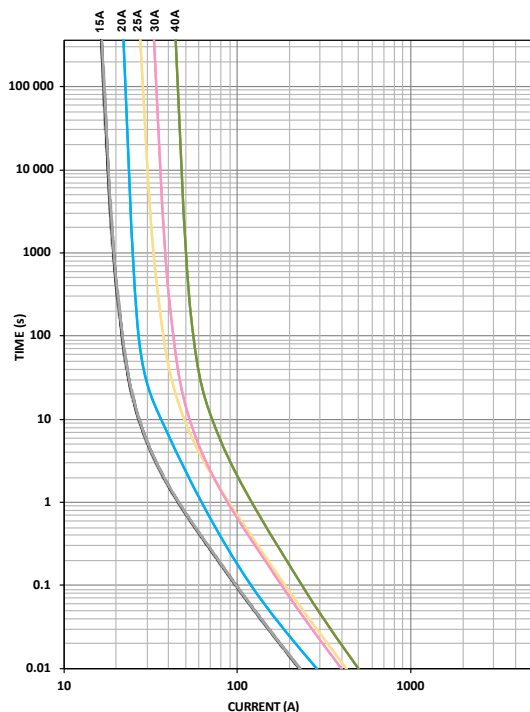
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# MCASE+™ Cartridge Fuses

## Rated 32V

### MCASE+™ Unslotted

#### Time-Current Characteristic Curves

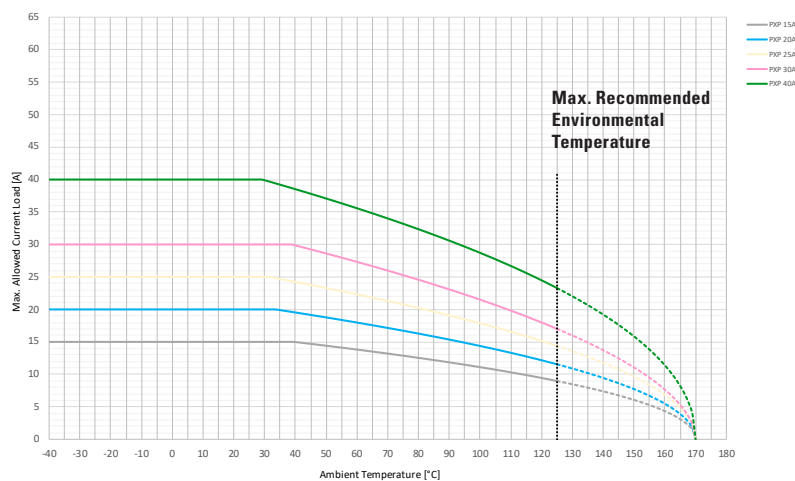


#### Time-Current Characteristics

% of Rating	Opening Time Min / Max (s)
110	360 000 / ∞
135	60 / 1800
200	2 / 60
350	0.2 / 7
600	0.04 / 1

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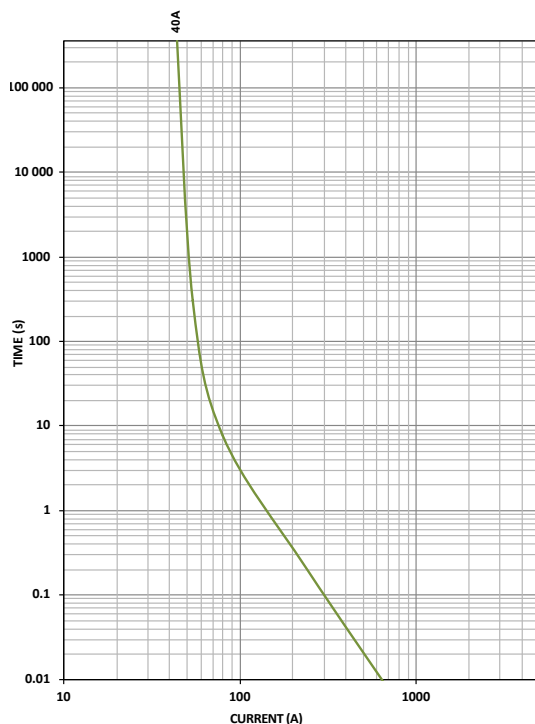
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<b>20A</b>	20	20	20	18	16	13	12
<b>25A</b>	25	25	25	22	20	17	14
<b>30A</b>	30	30	30	27	24	20	17
<b>40A</b>	40	40	40	35	31	27	23

# MCASE+™ Cartridge Fuses

## Rated 32V

### MCASE+™ Unslotted HT

#### Time-Current Characteristic Curves



#### Time-Current Characteristics

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135	60 / 1800
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