

MCAS020.XP Datasheet



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DiGi Electronics Part Number	MCAS020.XP-DG
Manufacturer	Littelfuse
Manufacturer Product Number	MCAS020.XP
Description	FUSE AUTO 20A 32VDC 1 PC CARD
Detailed Description	20 A AC 32 V DC Fuse Automotive Requires Holder A uto Link

This model MCAS020.XP is available at DiGi Electronics.

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Purchase and inquiry

Manufacturer Product Number:

MCAS020.XP

Series:

MCASE™

Mounting Type:

Requires Holder

Current Rating (Amps):

20 A

Response Time:

Slow Blow

Breaking Capacity @ Rated Voltage:

1kA

Operating Temperature:

-40°C ~ 125°C

Size / Dimension:

0.421" L x 0.244" W x 0.689" H (10.70mm x 6.20mm x 17.50mm)

Manufacturer:

Littelfuse

Product Status:

Active

Fuse Type:

Automotive

Voltage Rating - DC:

32 V

Package / Case:

Auto Link

Approval Agency:

-

Color:

Blue

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8536.10.0040

Moisture Sensitivity Level (MSL):

Not Applicable

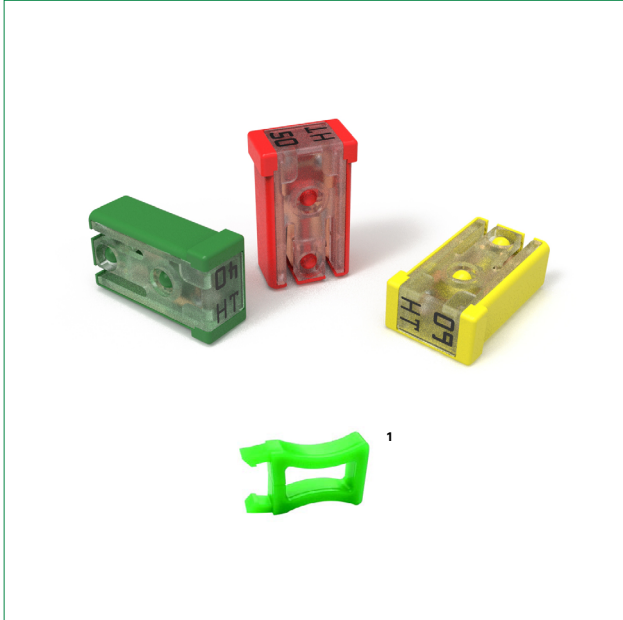
ECCN:

EAR99

MCASE+™ Series

Cartridge Fuses – Rated 32V

RoHS



1: Recommended MCASE Fuse Puller. MATERIAL NUMBER 00970054XPA

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 bus bars 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 terminals 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).

Features & Benefits

- Semitransparent cover makes it easier to see when fuse blows
- High-contrast amperage stamp on the top of the housing aids identification
- Color coding indicates amperage rating for each fuse
- High Temperature fuses clearly labeled "HT"
- Slotted fuses can mount on busbars
- Comply with ISO 8820-4

Applications

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

Additional Information



Resources



Samples

See Disclaimer Notice

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

*Note: Silver plating allows up to 150 °C at the terminal interface.

Ordering Information

Part Number	Type	Current Rating (A)	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

MCASE+™ Series

Cartridge Fuses – Rated 32V

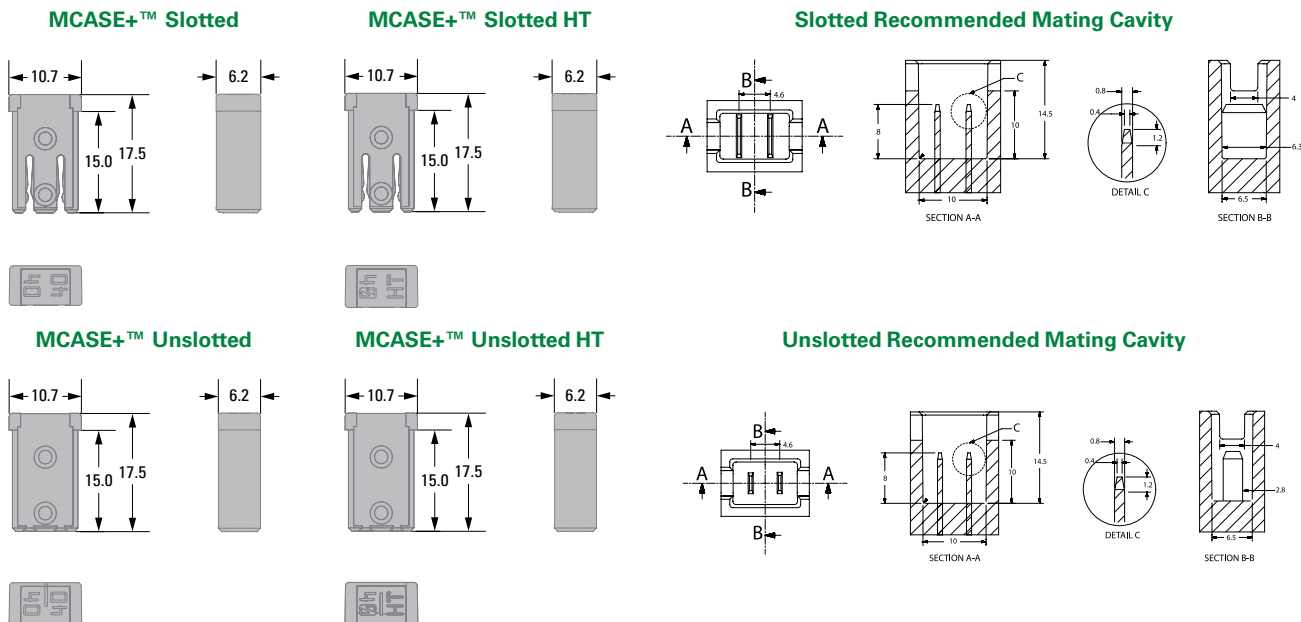
Ratings

Part Number	Type	Current Rating (A)	Housing Material Color	Test Cable Size (mm ²)	Typ. Voltage Drop (mV)	Typ. Cold Resistance (mΩ)	Typ. I ² t (A ² 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	13000
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

Note 1: 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.
Note 2: The typical I²t is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs.

Dimensions

Dimensions in mm. Please refer to the outline drawing for dimensions and tolerances.

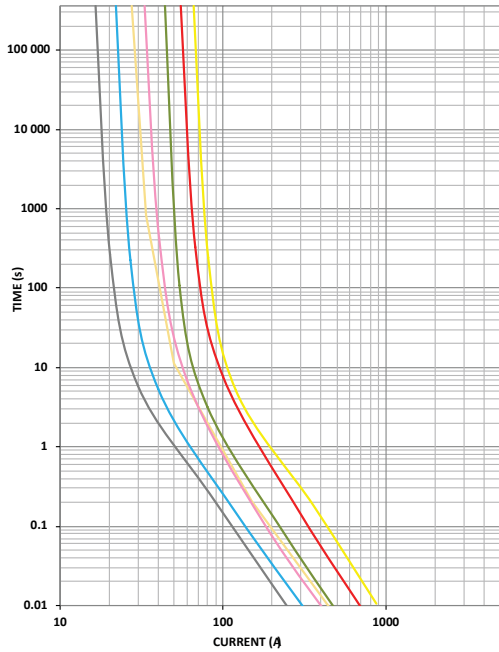


MCASE+™ Series

Cartridge Fuses – Rated 32V

MCASE+™ Slotted

Time-Current Characteristic



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

- 15 A
- 20 A
- 25 A
- 30 A
- 40 A
- 50 A
- 60 A

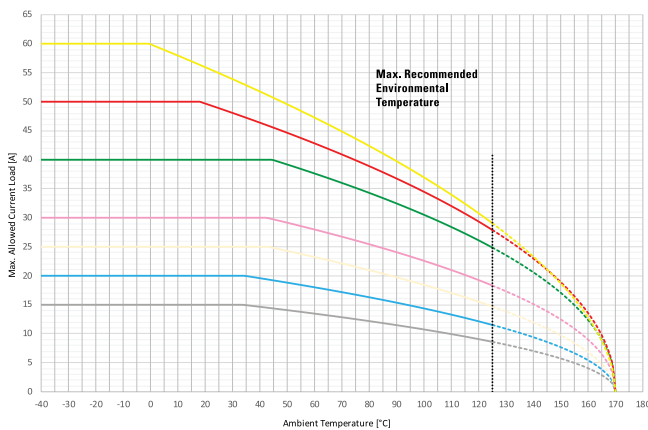
Note: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

Typical Derating Curves

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.



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

- 15 A
- 20 A
- 25 A
- 30 A
- 40 A
- 50 A
- 60 A

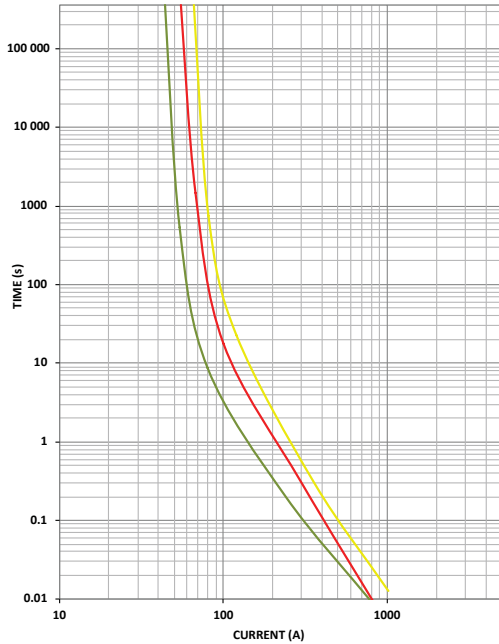
Note: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

MCASE+™ Series

Cartridge Fuses – Rated 32V

MCASE+™ Slotted HT

Time-Current Characteristic



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

— 40 A
— 50 A
— 60 A

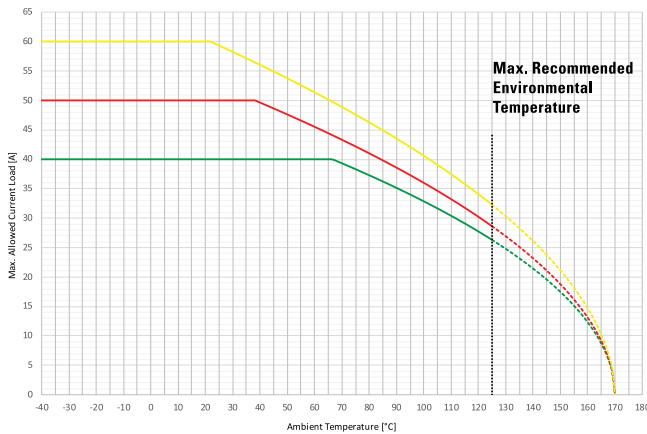
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Typical Derating Curves

Temperature security margin is 20%

Wire Cross Section And Fixture Test Set Up Refer To ISO 8820-3

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	Max. allowed current load (A) at ambient temperature based on typical derating						
	-40 °C	0 °C	20 °C	65 °C	85 °C	110 °C	125 °C
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

— PXPS 40 A HT
— PXPS 50 A HT
— PXPS 60 A HT

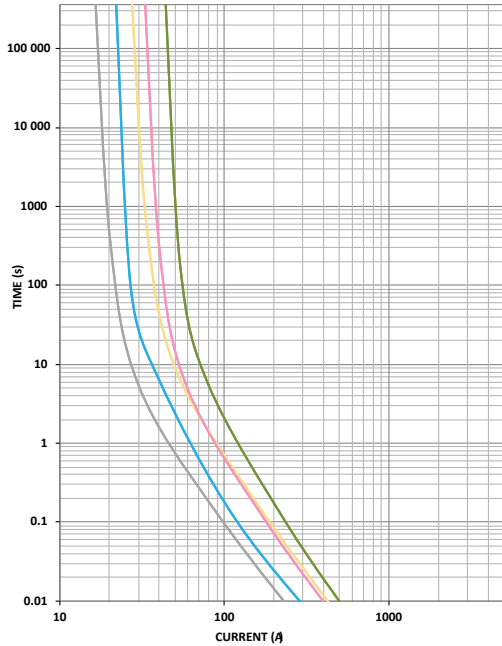
Note: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

MCASE+™ Series

Cartridge Fuses – Rated 32V

MCASE+™ Unslotted

Time-Current Characteristic



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

- 15 A
- 20 A
- 25 A
- 30 A
- 40 A

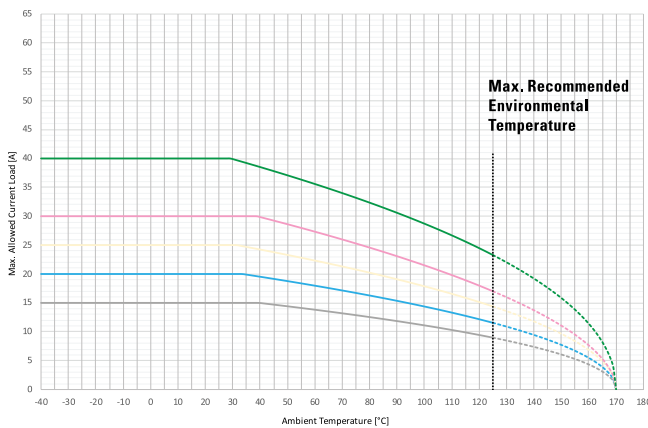
Note: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

Typical Derating Curves

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.



Max. allowed current load (A) at ambient temperature based on typical derating

	-40 °C	0 °C	20 °C	65 °C	85 °C	110 °C	125 °C
15A	15	15	15	14	12	10	9
20A	20	20	20	18	16	13	12
25A	25	25	25	22	20	17	14
30A	30	30	30	27	24	20	17
40A	40	40	40	35	31	27	23

- PXP 15 A
- PXP 20 A
- PXP 25 A
- PXP 30 A
- PXP 40 A

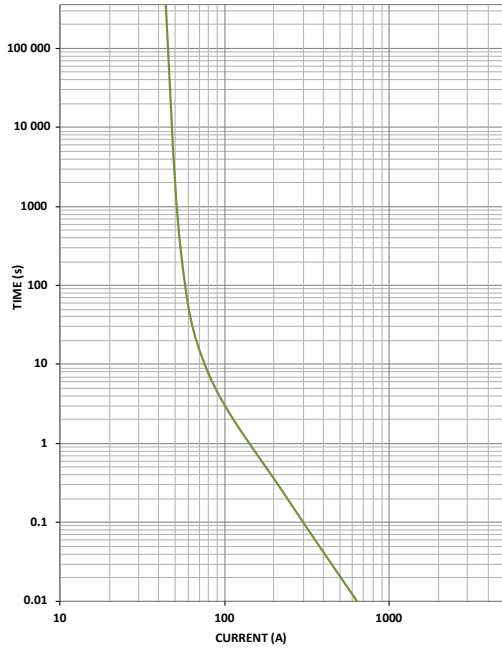
Note: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

MCASE+™ Series

Cartridge Fuses – Rated 32V

MCASE+™ Unslotted HT

Time-Current Characteristic



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

— 40 A

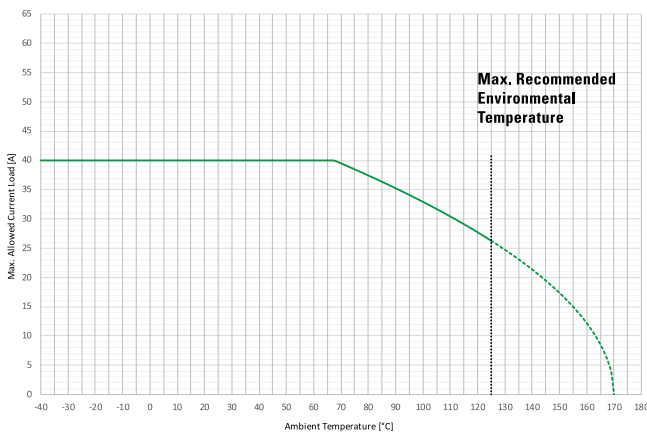
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Typical Derating Curves

Temperature security margin is 20%

Wire Cross Section And Fixture Test Set Up Refer To ISO 8820-3

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Max. allowed current load (A) at ambient temperature based on typical derating

	-40 °C	0 °C	20 °C	65 °C	85 °C	110 °C	125 °C
40A HT	40	40	40	40	36	30	26

— PXP 40A HT

Note: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

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