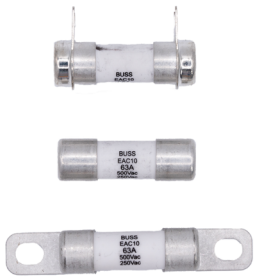
EAC10

10 x 32 mm high breaking capacity fuse



Product features

- 10 x 32 mm fuse
- Current rating: 40 A to 63 A
- Up to 500 Vac rating
- High breaking capacity for high energy application
- Cartridge, bolt-down terminal and PCB terminal options available

Applications

- Uninterruptible power supplies (UPS)
- 3-phase EVSE and charging infrastructure
- Motor protection
- Vac input protection in rectifiers
- Vac output in inverters

Agency information

cURus Recognition file number: E91958 for for EAC10-XX-PCB

Environmental compliance

HALOGEN HF FREE RoHS Pb

Ordering part number

EAC10-40-PCB

Family code
Ampere rating
Option code

Option code

None - Cartridge fuse without lead terminal

PCB - PCB terminal

T - Bolt-down terminal

Electrical characteristics

Current and time characteristics	
1.0 In	1 hour minimum
2.0 In	120 seconds maximum

Product specifications

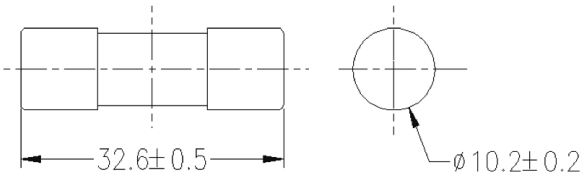
Part number	Rated voltage	Rated current	Breaking capacity	Typical cold resistance[1] (mOhms)	Power Loss at 1.0 In (W)
EAC10-40	500 Vac 250 Vac	40 A	2000 A @ 500 Vac 10000 A @ 250 Vac	1.71	4.7
EAC10-50	500 Vac 250 Vac	50 A	2000 A @ 500 Vac 10000 A @ 250 Vac	1.33	5.7
EAC10-63	500 Vac 250 Vac	63 A	2000 A @ 500 Vac 10000 A @ 250 Vac	1.05	7.5

1. DC Cold Resistance measured at <10% of rated current in the ambient temperature of +25 °C

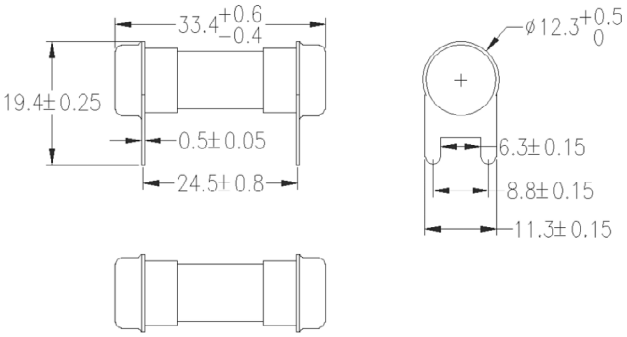
Dimensions- mm

Drawing not to scale

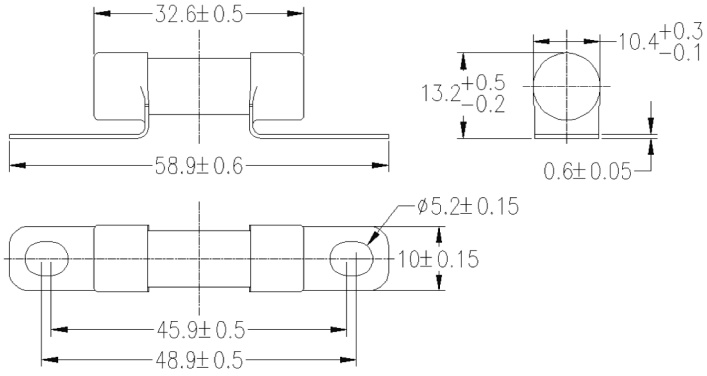
Cartridge version



PCB terminal version

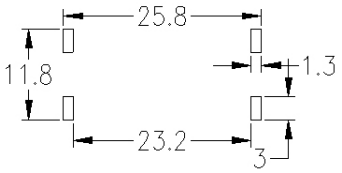


Bolt version

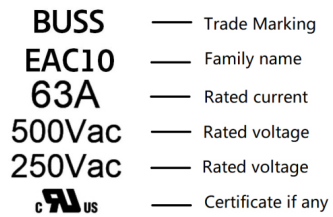


Note: recommend tightening torque is 3.5-4 Nm for M5 screw

Recommended PCB layout



Part marking (Example: EAC10-63)



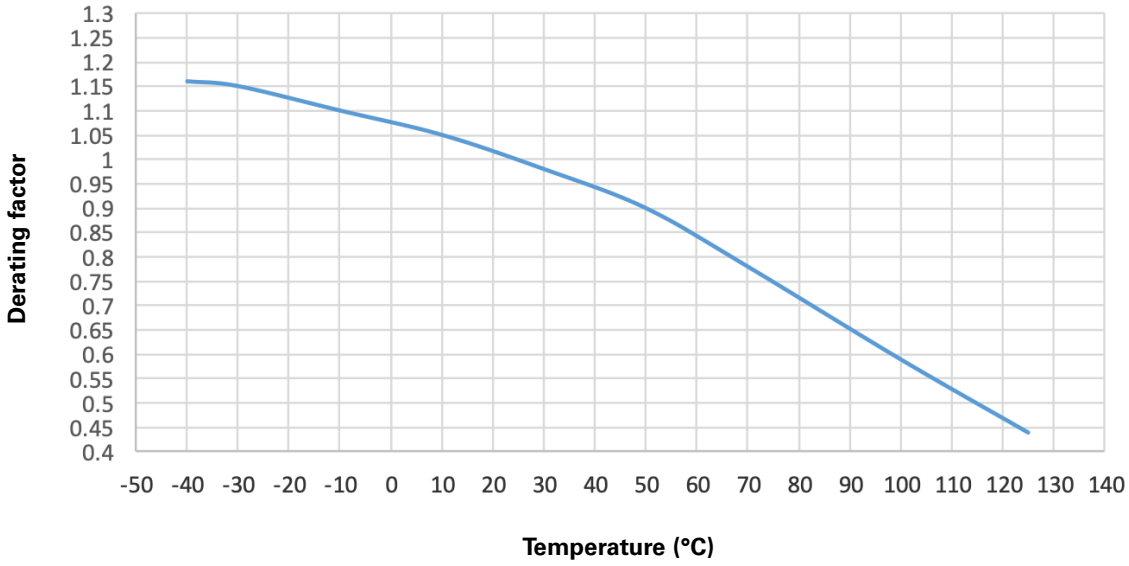
General specifications

Mechanical vibration: MIL-STD-202, Method 201, For EAC10-XX; EAC10-XX-PCB and EAC10-XX-T
Thermal shock: MIL-STD-202, Method 107,Test Condition B (5 cycles -65°C to 125°C), For EAC10-XX; EAC10-XX-PCB and EAC10-XX-T
Humidity: MIL-STD-202, Method 103, Test Condition A: 95% RH and 40 °C for 240 hours, For EAC10-XX; EAC10-XX-PCB and EAC10-XX-T
Salt spray: MIL-STD-202, Method 101 Test condition B, For EAC10-XX; EAC10-XX-PCB and EAC10-XX-T
Thermal shock resistance: JASO D622 6.3.6, For EAC10-XX-PCB and EAC10-XX-T only
Transient current intermittent cycle durability: JASO D622 6.3.2, For EAC10-XX-PCB and EAC10-XX-T only
Heat resistance to soldering: MIL-STD-202 Method 210, For EAC10-XX-PCB only
Terminal strength: MIL-STD-202, Method 211, Test Condition A, For EAC10-XX-T only
Lead solderability: MIL-STD-202, Method 208, For EAC10-XX-PCB only

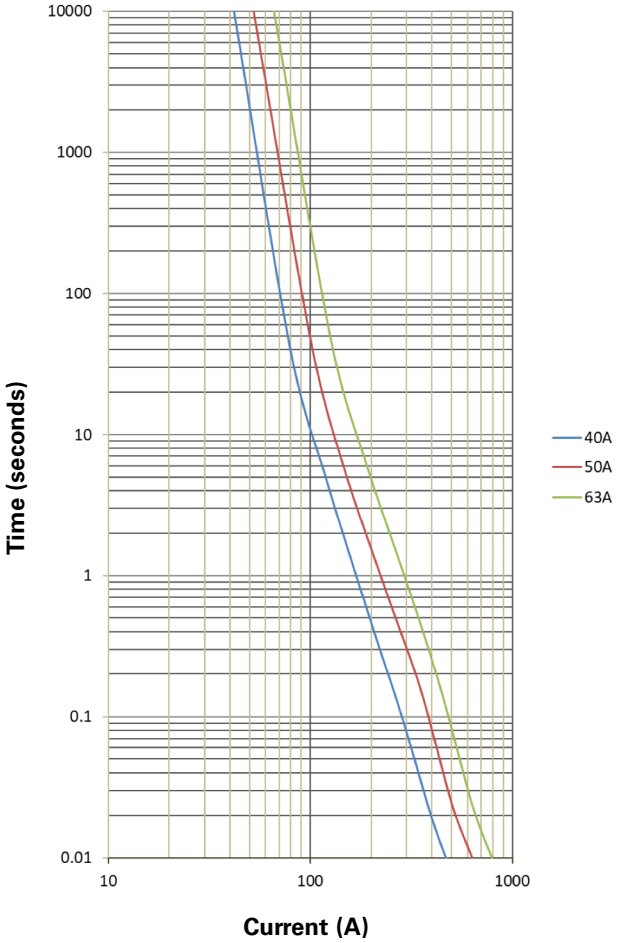
Packaging information - mm

45 pcs in a plastic tray, 10 trays (450 pcs) in a carton

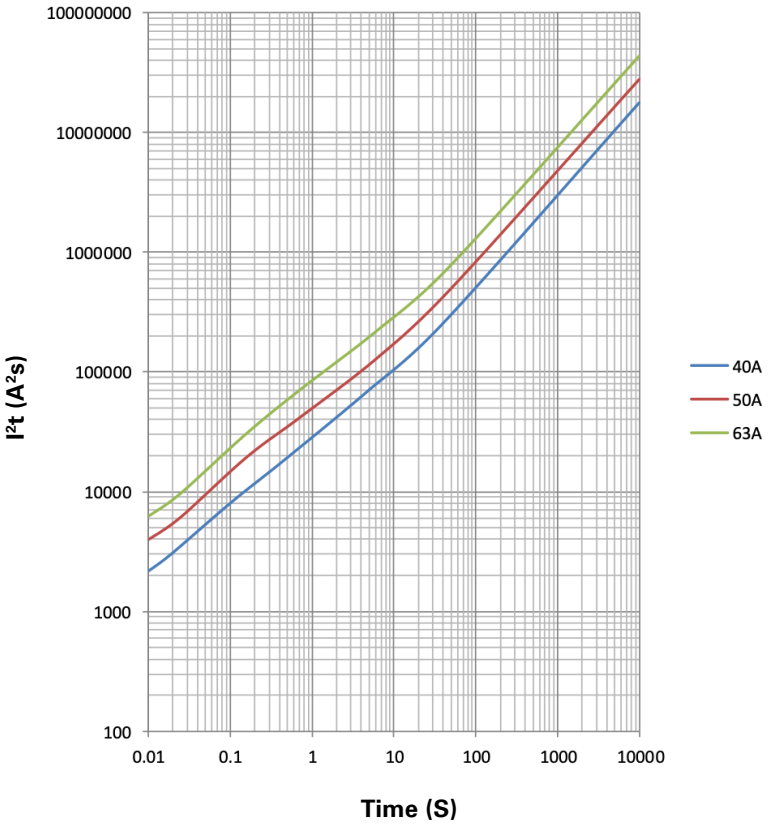
Temperature derating curve



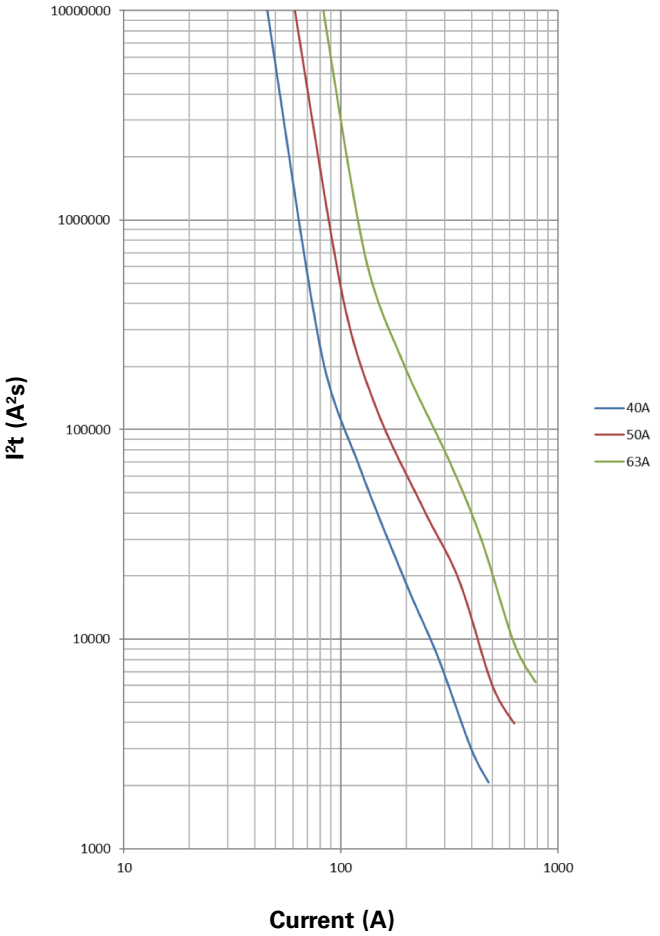
Current vs. time curve



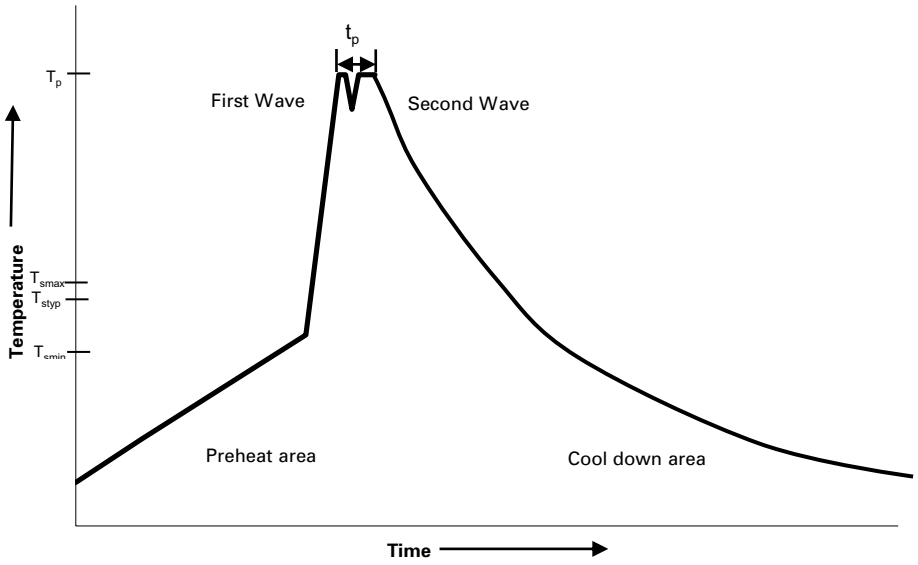
I²T and time curve



I²t and current curve



Wave solder profile--PCB version only



Reference EN 61760-1:2006

Profile feature		Standard SnPb solder	Lead (Pb) free solder
Preheat	• Temperature min. (T_{smin})	100 °C	100 °C
	• Temperature typ. (T_{styp})	120 °C	120 °C
	• Temperature max. (T_{smax})	130 °C	130 °C
	• Time (T_{smin} to T_{smax}) (t_s)	70 seconds	70 seconds
Δ preheat to max Temperature		150 °C max.	150 °C max.
Peak temperature (T_p)*		235 °C – 260 °C	250 °C – 260 °C
Time at peak temperature (t_p)		10 seconds max 5 seconds max each wave	10 seconds max 5 seconds max each wave
Ramp-down rate		~ 2 K/s min ~3.5 K/s typ ~5 K/s max	~ 2 K/s min ~3.5 K/s typ ~5 K/s max
Time 25 °C to 25 °C		4 minutes	4 minutes

Manual solder

+350 °C (4-5 seconds by soldering iron), generally manual/hand soldering is not recommended.

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