

EVpack-fuse MEV100

1,000 VDC Max., L/R ≤ 1ms, 8 - 600A

BATTERY FUSES

BATTERY PACK FUSES



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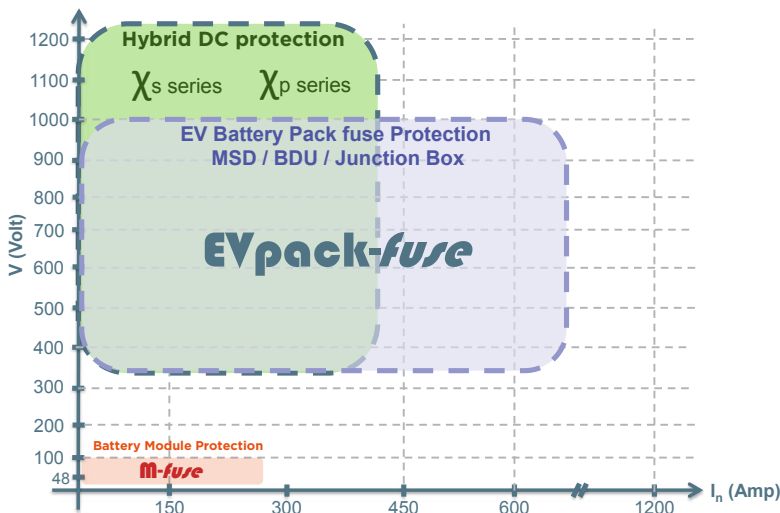


EVpack-fuse line-up belongs to the new DC Over-Current protection (O.C.P.) range developed by MERSEN to address specific needs in EV/ HEV and Battery Electrical Storage System.

EVpack-fuse provides the ultimate protection of the battery pack offering reliable clearing of DC fault currents.

It has been specifically engineered and tested to provide DC applications best-in-class protection performance: Up to 1,000VDC, Current rating (In)= 8 to 600A, Interrupting Rating (IR) = 20kA, L/R ≤ 1ms, Minimum Breaking Capacity (MBC) < 3kA for a perfect matching with DC contactor.

Typical usage of EVpack-fuse in Mersen DC protection family



FEATURES & BENEFITS

- Design for DC applications
- Low watt losses
- High cycling performance
- Full coverage of battery module voltage and current
- Ultra compact size
- Current Ratings (In): 8 to 600A
- Interrupting Rating (IR): 20kA @ 1,000 VDC, L/R ≤ 1ms

APPLICATIONS

- EV/HEV
- Electrical Energy Storage
- Battery pack protection
- Battery Disconnect Unit (BDU)
- Battery Junction Box for auxiliaries
- Battery charger
- Supercapacitor pack protection
- Backup protection for DC relay / disconnect / switch
- Maintenance Safety Disconnect (MSD)

STANDARDS

- Power Cycling & Vibration: JASO D622



EV pack-fuse

PRODUCT RANGE



MEV100C30

MEV100C Ferrule Fuse

Catalog number	Rated DC voltage	Rated current I _n	Power dissipation at 0.5 I _n	Min. breaking capacity (MBC)	Max. time to clear MBC	Weight
MEV100C8	1000 V	8 A	0.23 W	16 A	100 s	7.5 g
MEV100C10	1000 V	10 A	0.32 W	20 A	100 s	7.5 g
MEV100C12	1000 V	12 A	0.42 W	24 A	100 s	7.5 g
MEV100C15	1000 V	15 A	0.63 W	30 A	100 s	7.5 g
MEV100C20	1000 V	20 A	0.92 W	40 A	100 s	7.5 g
MEV100C25	1000 V	25 A	1.1 W	50 A	100 s	7.5 g
MEV100C30	1000 V	30 A	1.2 W	60 A	100 s	7.5 g



MEV100C15-S

MEV100C -S Surface Mount

Catalog number	Rated DC voltage	Rated current I _n	Power dissipation at 0.5 I _n	Min. breaking capacity (MBC)	Max. time to clear MBC	Weight
MEV100C8-S	1000 V	8 A	0.23 W	16 A	100 s	9.9 g
MEV100C10-S	1000 V	10 A	0.32 W	20 A	100 s	9.9 g
MEV100C12-S	1000 V	12 A	0.42 W	24 A	100 s	9.9 g
MEV100C15-S	1000 V	15 A	0.63 W	30 A	100 s	9.9 g
MEV100C20-S	1000 V	20 A	0.92 W	40 A	100 s	9.9 g
MEV100C25-S	1000 V	25 A	1.1 W	50 A	100 s	9.9 g
MEV100C30-S	1000 V	30 A	1.2 W	60 A	100 s	9.9 g



MEV100A300-4

MEV100A Round Body Fuse

Catalog number	Rated DC voltage	Rated current I _n	Power dissipation at 0.5 I _n	Min. breaking capacity (MBC)	Max. time to clear MBC	Weight
MEV100A50-4	1000 V	50 A	1.8 W	960 A	40 ms	117 g
MEV100A60-4	1000 V	60 A	2.2 W	1160 A	40 ms	117 g
MEV100A70-4	1000 V	70 A	2.7 W	1350 A	40 ms	117 g
MEV100A80-4	1000 V	80 A	3.2 W	1540 A	40 ms	117 g
MEV100A90-4	1000 V	90 A	3.6 W	1730 A	40 ms	117 g
MEV100A100-4	1000 V	100 A	4.3 W	1920 A	40 ms	117 g
MEV100A125-4	1000 V	125 A	4 W	940 A	80 ms	192 g
MEV100A150-4	1000 V	150 A	5.2 W	1130 A	80 ms	192 g
MEV100A175-4	1000 V	175 A	6.3 W	1320 A	80 ms	192 g
MEV100A200-4	1000 V	200 A	7.4 W	1510 A	80 ms	192 g
MEV100A225-4	1000 V	225 A	6.7 W	2200 A	80 ms	301 g
MEV100A250-4	1000 V	250 A	7.6 W	2430 A	80 ms	301 g
MEV100A300-4	1000 V	300 A	9.5 W	2920 A	80 ms	301 g



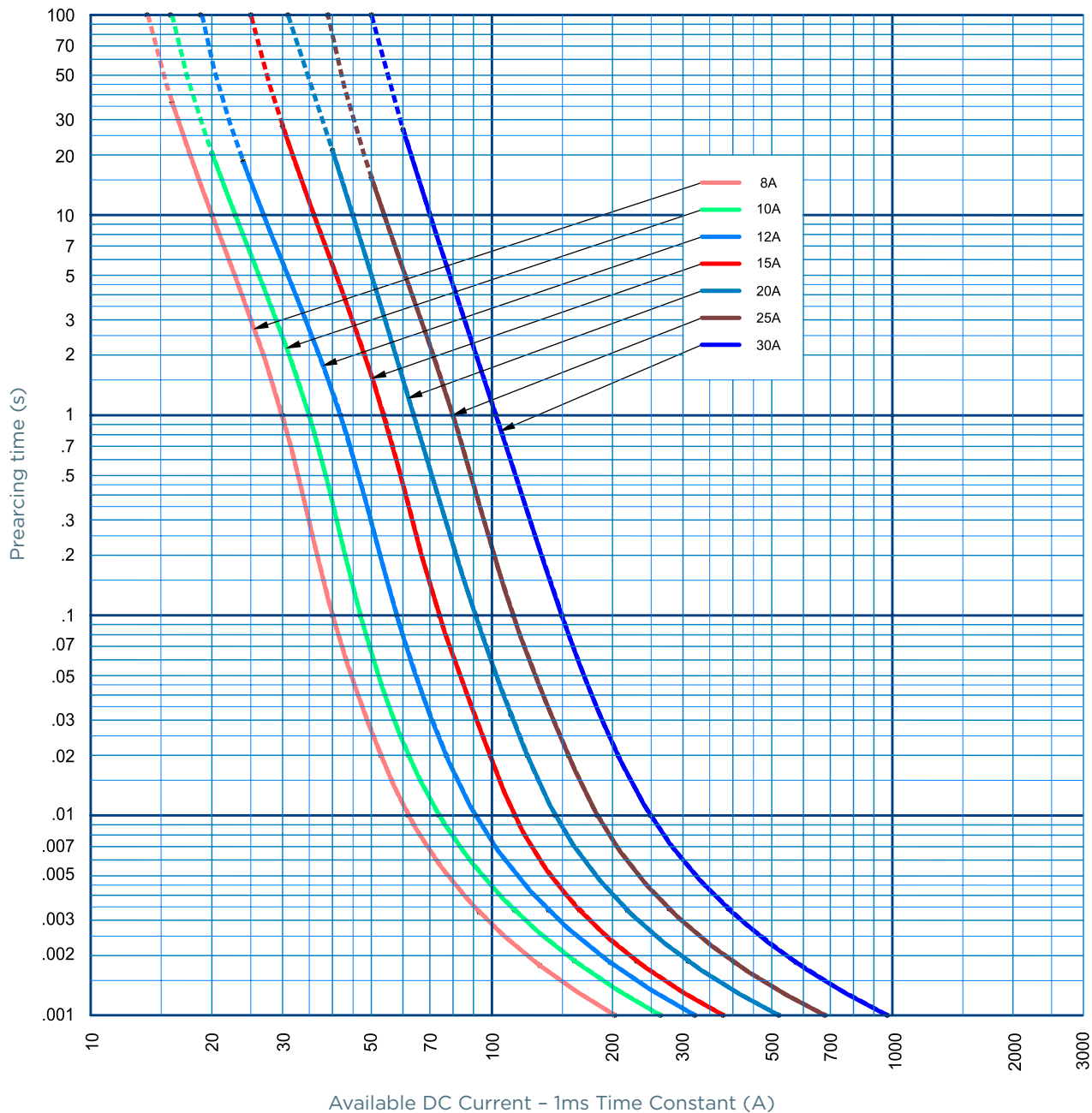
MEV100J400-4

MEV100J Round Body Fuse

Catalog number	Rated DC voltage	Rated current I _n	Power dissipation at 0.5 I _n	Min. breaking capacity (MBC)	Max. time to clear MBC	Weight
MEV100J350-4	1000 V	350 A	9 W	700 A	180 s	857 g
MEV100J400-4	1000 V	400 A	10.4 W	800 A	180 s	859 g
MEV100J450-4	1000 V	450 A	11.2 W	900 A	235 s	1340 g
MEV100J500-4	1000 V	500 A	11.6 W	1000 A	280 s	1340 g
MEV100J600-4	1000 V	600 A	16.4 W	1200 A	200 s	1340 g

TIME CURRENT CHARACTERISTIC CURVES

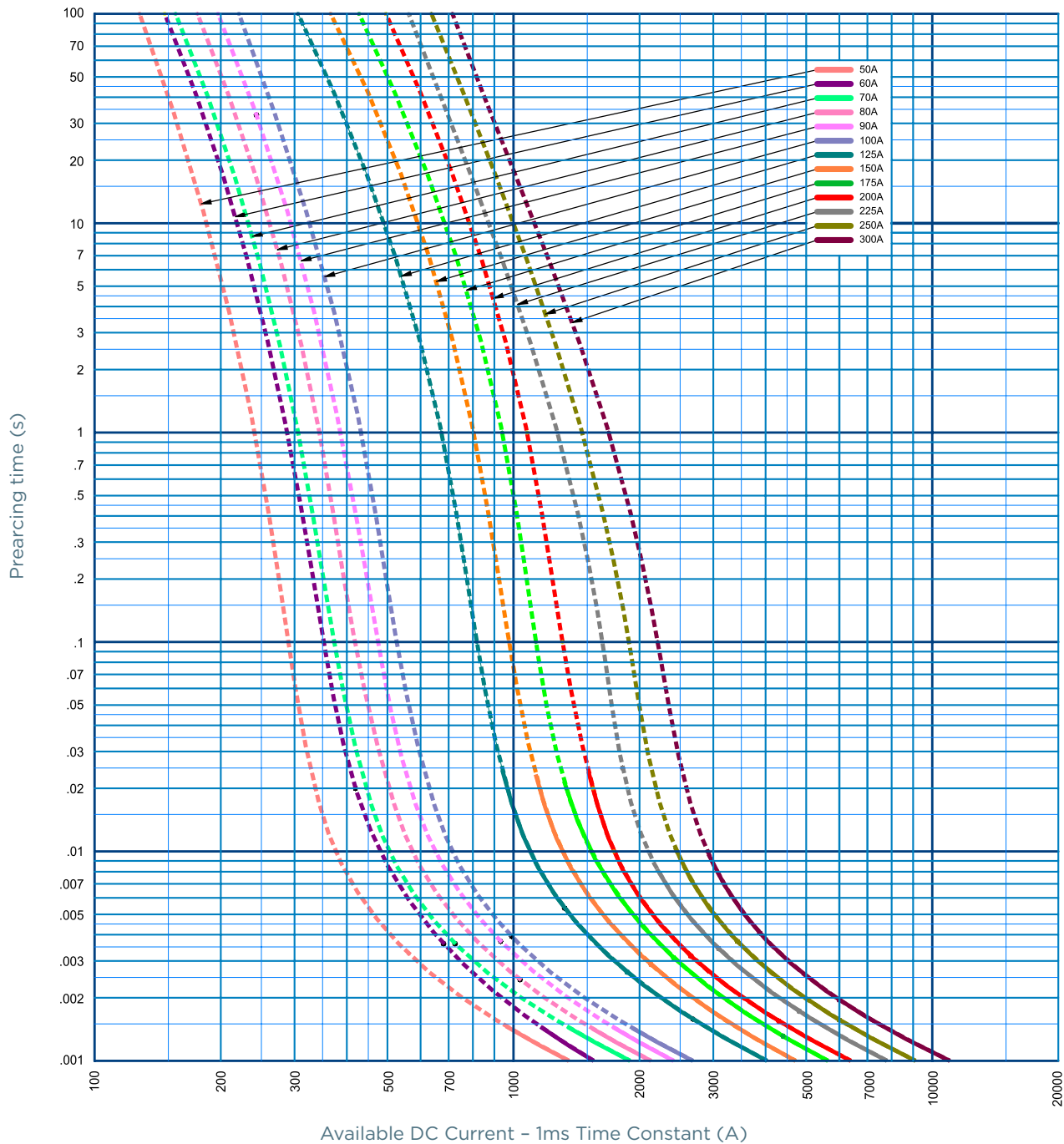
MEV100C, -S



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TIME CURRENT CHARACTERISTIC CURVES

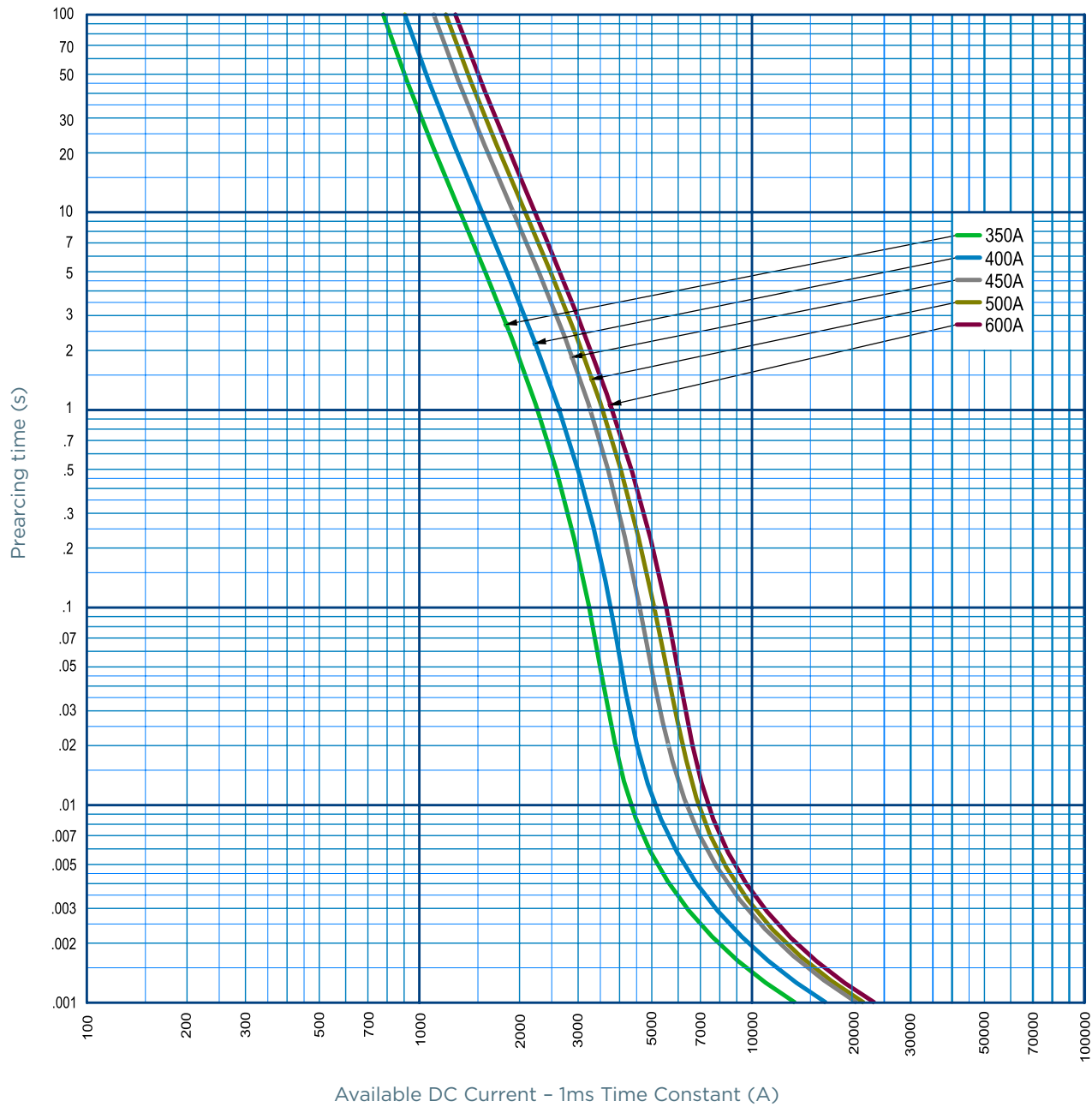
MEV100A



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TIME CURRENT CHARACTERISTIC CURVES

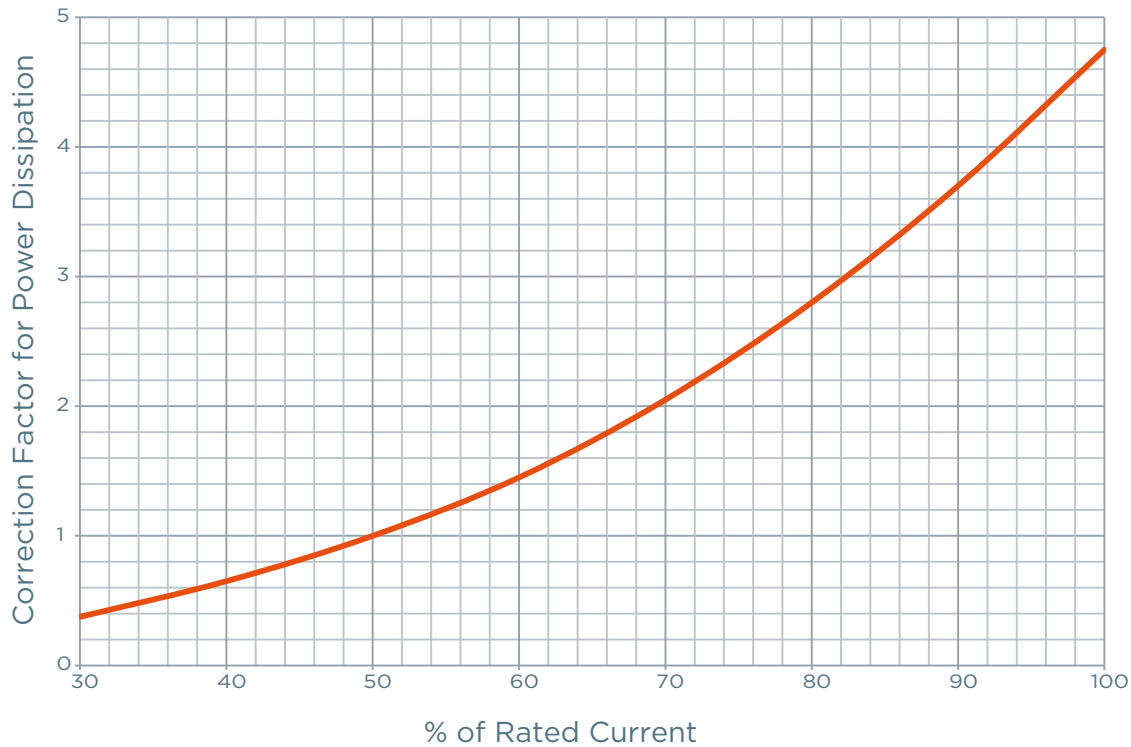
MEV100J



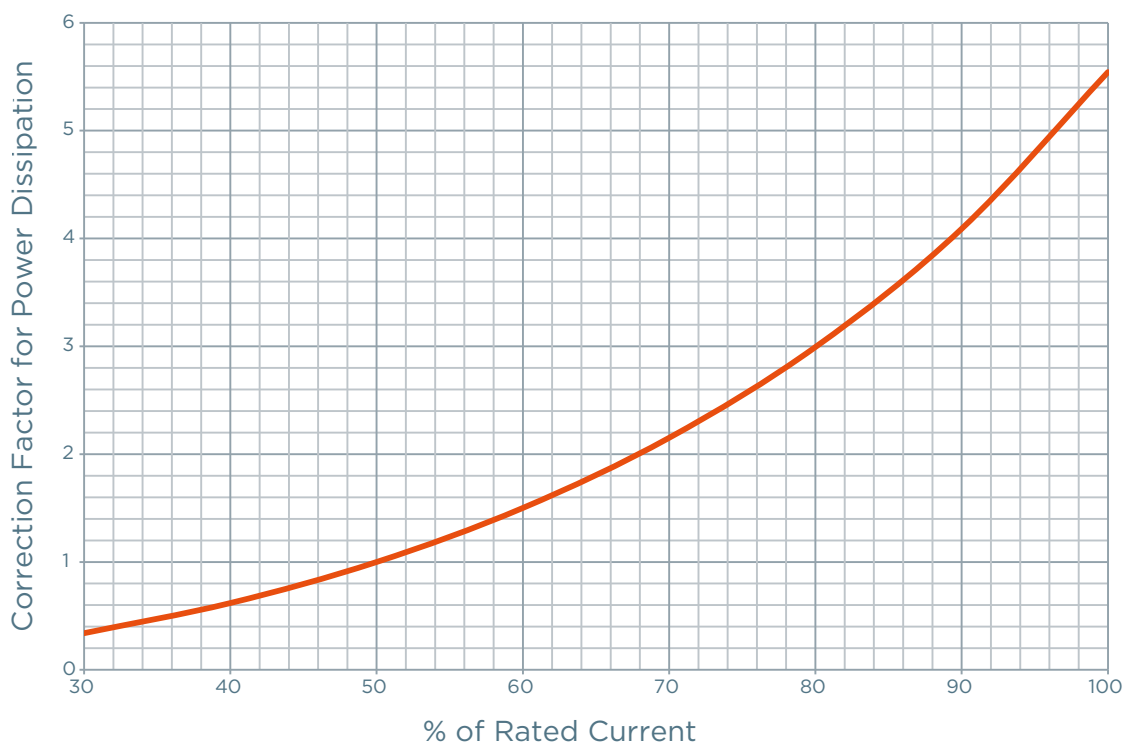
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POWER DISSIPATION

MEV100C, -S



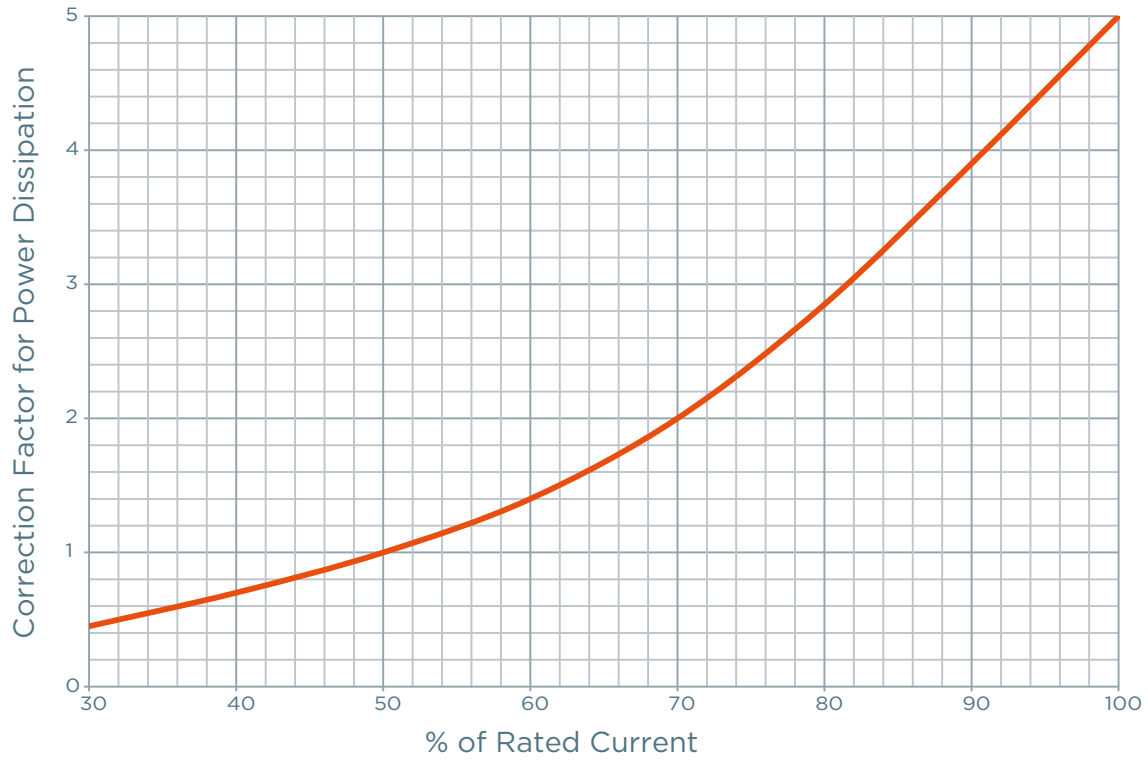
MEV100A



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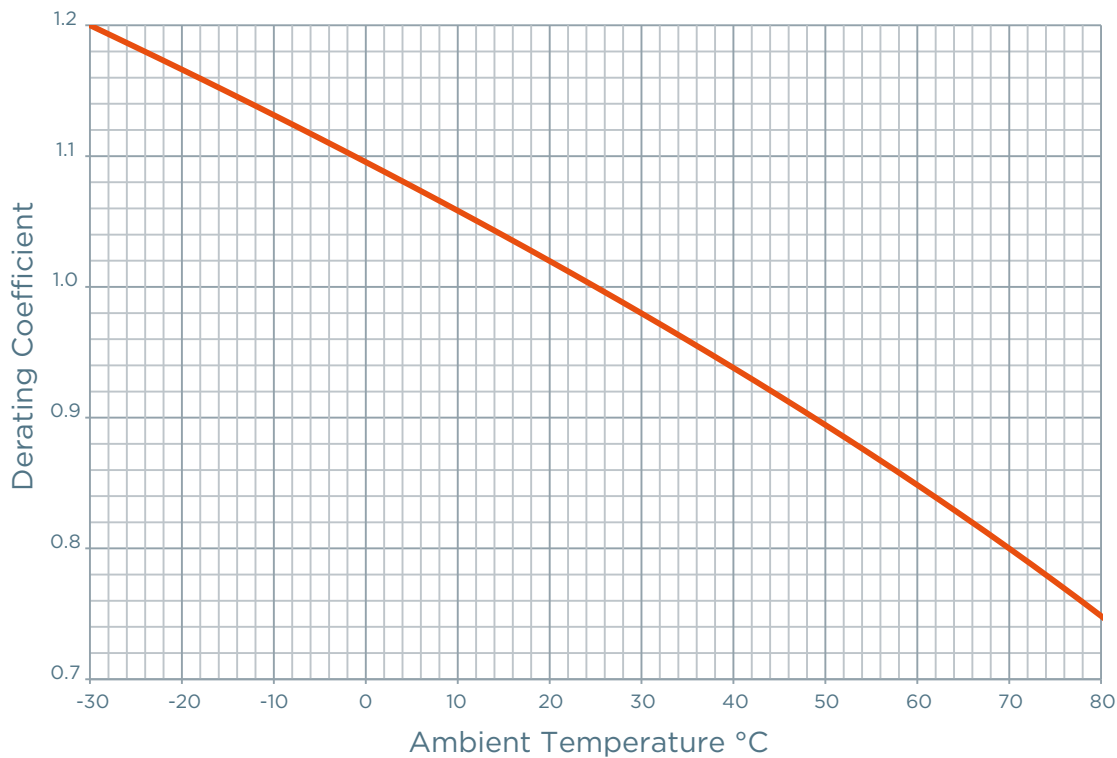
POWER DISSIPATION

MEV100J



TEMPERATURE DERATING

MEV100C, MEV100C-S & MEV100A & MEV100J

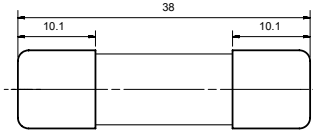


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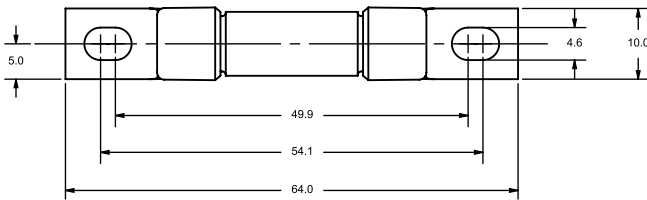
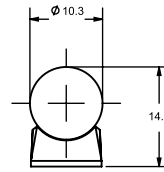
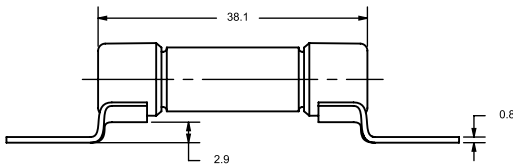
DIMENSIONS

MEV100C Ferrule Fuse (8-30A)



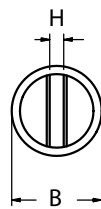
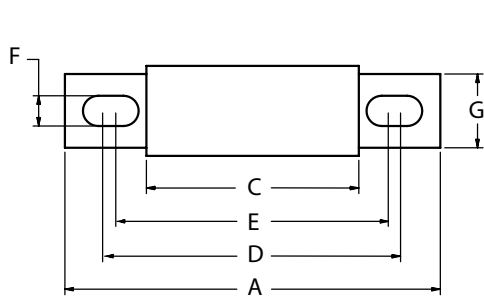
Dimensions in mm

MEV100C -S Surface Mount Fuse (8-30A)



Dimensions in mm

MEV100A (50-300A) & MEV100J (350-600A)



Article Number	A	B	C	D	E	F	G	H
MEV100A50 to 100 (inch. / mm)	4,38 111	1 25,4	2,88 73	3,69 93,6	3,5 88,9	0,31 7,9	0,75 19	0,13 3,2
MEV100A125 to 200 (inch. / mm)	4,38 111	1,22 31	2,88 73	3,69 93,6	3,56 90,5	0,31 7,9	1 25,4	0,19 4,8
MEV100A225 to 300 (inch. / mm)	5,09 129	1,5 38,1	2,84 72,2	4,16 106	3,53 89,7	0,4 10,3	1 25,4	0,25 6,4
MEV100J350 to 400 (inch. / mm)	7,13 181	2,13 54	3,38 85,9	5,81 137,2	5,25 129,5	0,41 10,4	1,63 41,4	0,25 6,4
MEV100J450 to 600 (inch. / mm)	8 203,2	2,5 63,5	3,75 95,3	6,19 157,2	5,81 147,6	0,53 13,5	2,5 6,35	0,38 9,7