

EVpack-fuse MEV55

550 VDC Max., L/R $\leq$ 1ms, 5 - 50A

BATTERY FUSES

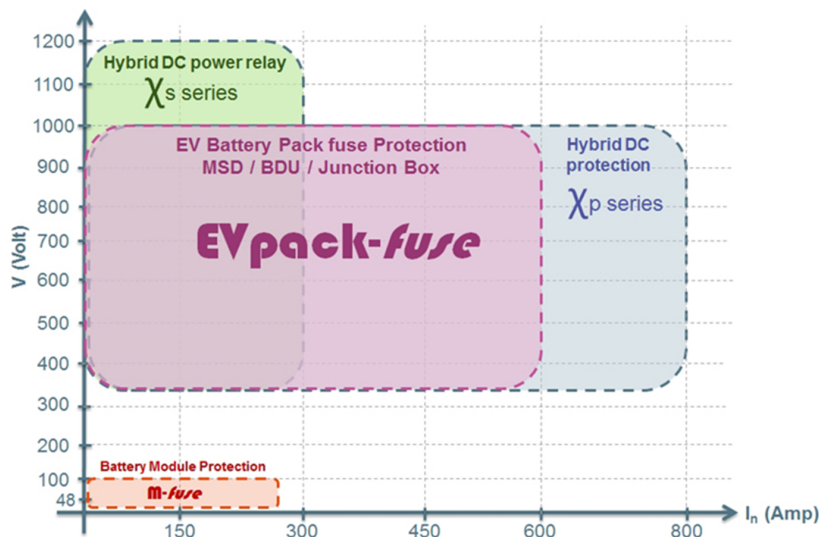
BATTERY PACK FUSES



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 550VDC, Current rating (I_n) = 5 to 50A, Interrupting Rating (IR) = 20kA, L/R $\leq$ 1ms, Minimum Breaking Capacity (MBC) < 3kA for a perfect matching with DC contactor.



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 (I_n): 5 to 50A
- Interrupting Rating (IR): 20kA @ 550VDC, 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

- Complies to Automotive IATF 16949:2016 Quality System
- Power Cycling & Vibration JASO D622



EV pack-fuse

PRODUCT RANGE



MEV55C30

MEV55C Ferrule Fuse

Catalog number	Rated voltage DC (UL)	Rated current I _n	Power dissipation at 0.5 I _n	Min. breaking capacity (MBC)	Max. time to clear MBC	Package	Weight
MEV55C5	550 V	5 A	0.25 W	10 A	10 s	80	7.5 g
MEV55C6	550 V	6 A	0.29 W	12 A	10 s	80	7.5 g
MEV55C7	550 V	7 A	0.31 W	14 A	10 s	80	7.5 g
MEV55C8	550 V	8 A	0.4 W	16 A	10 s	80	7.5 g
MEV55C10	550 V	10 A	0.45 W	20 A	10 s	80	7.5 g
MEV55C12	550 V	12 A	0.47 W	24 A	10 s	80	7.5 g
MEV55C15	550 V	15 A	0.49 W	30 A	100 s	80	7.5 g
MEV55C20	550 V	20 A	0.56 W	40 A	100 s	80	7.5 g
MEV55C25	550 V	25 A	0.63 W	50 A	100 s	80	7.5 g
MEV55C30	550 V	30 A	0.68 W	60 A	100 s	80	7.5 g
MEV55C30/40	550 V	40 A	0.63 W	150 A	10 s	80	7.5 g
MEV55C30/50	550 V	50 A	1 W	180 A	10 s	80	7.5 g



MEV55C30-S

MEV55C -S Surface Mount Fuse

Catalog number	Rated voltage DC (UL)	Rated current I _n	Power dissipation at 0.5 I _n	Min. breaking capacity (MBC)	Max. time to clear MBC	Package	Weight
MEV55C5-S	550 V	5 A	0.25 W	10 A	10 s	80	9.9 g
MEV55C6-S	550 V	6 A	0.29 W	12 A	10 s	80	9.9 g
MEV55C7-S	550 V	7 A	0.31 W	14 A	10 s	80	9.9 g
MEV55C8-S	550 V	8 A	0.4 W	16 A	10 s	80	9.9 g
MEV55C10-S	550 V	10 A	0.45 W	20 A	10 s	80	9.9 g
MEV55C12-S	550 V	12 A	0.47 W	24 A	10 s	80	9.9 g
MEV55C15-S	550 V	15 A	0.49 W	30 A	100 s	80	9.9 g
MEV55C20-S	550 V	20 A	0.56 W	40 A	100 s	80	9.9 g
MEV55C25-S	550 V	25 A	0.63 W	50 A	100 s	80	9.9 g
MEV55C30-S	550 V	30 A	0.68 W	60 A	100 s	80	9.9 g
MEV55C30/40-S	550 V	40 A	0.63 W	150 A	10 s	80	9.9 g
MEV55C30/50-S	550 V	50 A	1 W	180 A	10 s	80	9.9 g



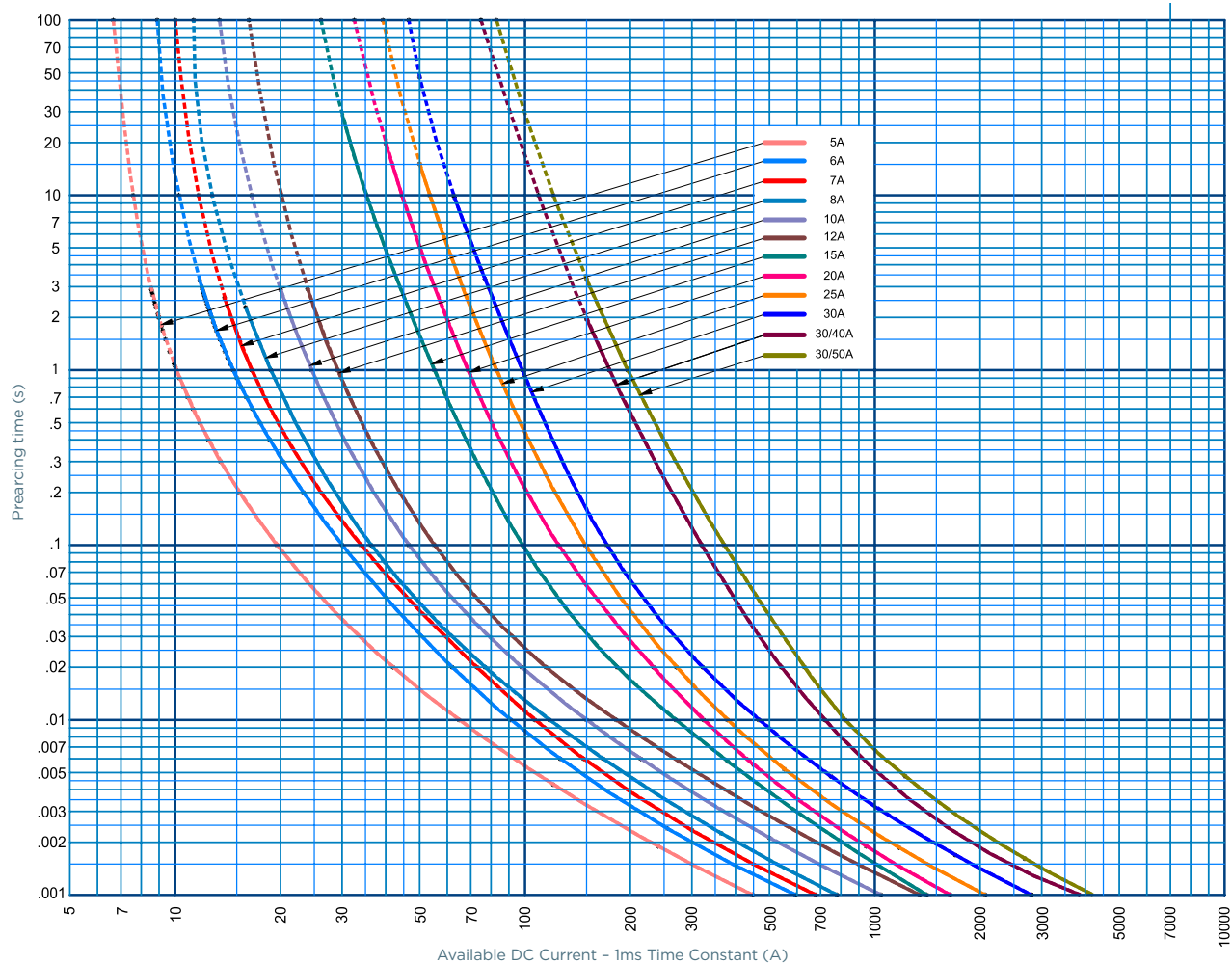
MEV55C30-P

MEV55C -P PC Board Mount

Catalog number	Rated voltage DC (UL)	Rated current I _n	Power dissipation at 0.5 I _n	Min. breaking capacity (MBC)	Max. time to clear MBC	Package	Weight
MEV55C5-P	550 V	5 A	0.25 W	10 A	10 s	80	9.9 g
MEV55C6-P	550 V	6 A	0.29 W	12 A	10 s	80	9.9 g
MEV55C7-P	550 V	7 A	0.31 W	14 A	10 s	80	9.9 g
MEV55C8-P	550 V	8 A	0.4 W	16 A	10 s	80	9.9 g
MEV55C10-P	550 V	10 A	0.45 W	20 A	10 s	80	9.9 g
MEV55C12-P	550 V	12 A	0.5 W	24 A	10 s	80	9.9 g
MEV55C15-P	550 V	15 A	0.45 W	30 A	100 s	80	9.9 g
MEV55C20-P	550 V	20 A	0.54 W	40 A	100 s	80	9.9 g
MEV55C25-P	550 V	25 A	0.59 W	50 A	100 s	80	9.9 g
MEV55C30-P	550 V	30 A	0.65 W	60 A	100 s	80	9.9 g
MEV55C30/40-P	550 V	40 A	0.63 W	150 A	10 s	80	9.9 g
MEV55C30/50-P	550 V	50 A	1.1 W	180 A	10 s	80	9.9 g

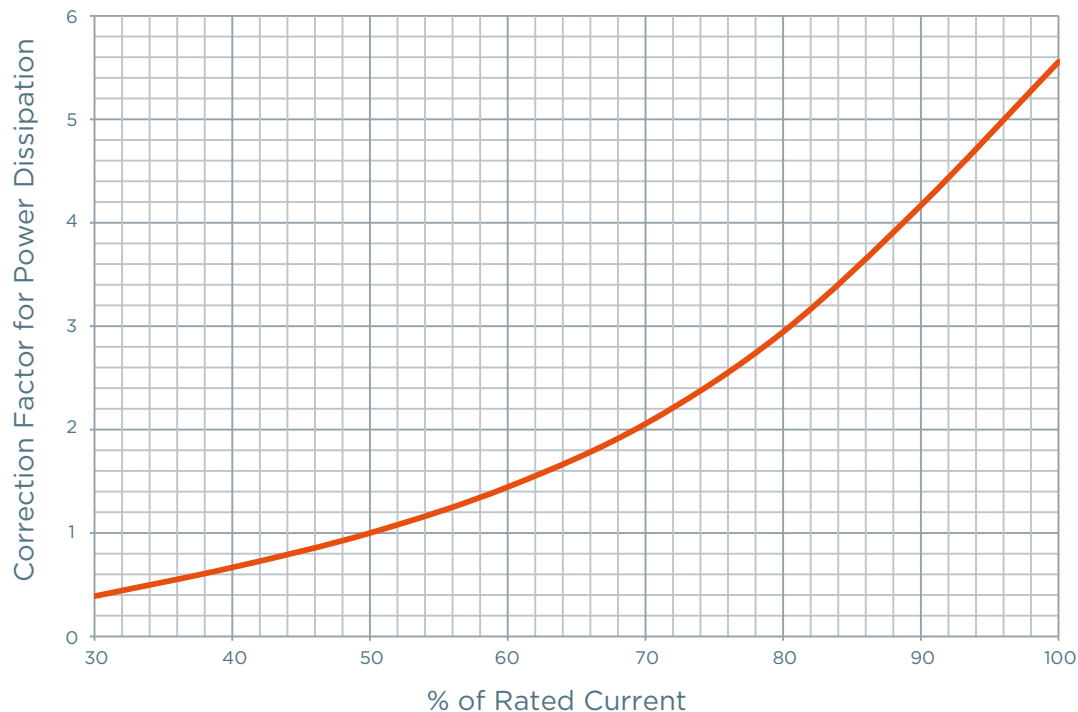
TIME CURRENT CHARACTERISTIC CURVES

MEV55C, -S, -P



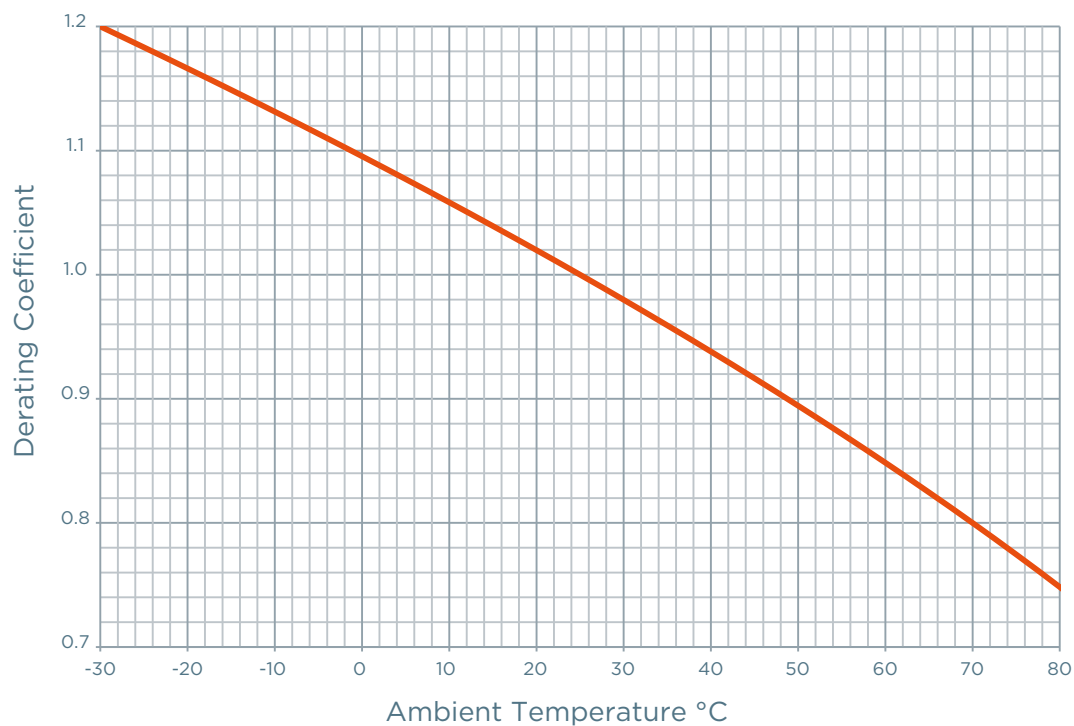
POWER DISSIPATION

MEV55C, -S, -P



TEMPERATURE DERATING

MEV55C, -S, -P



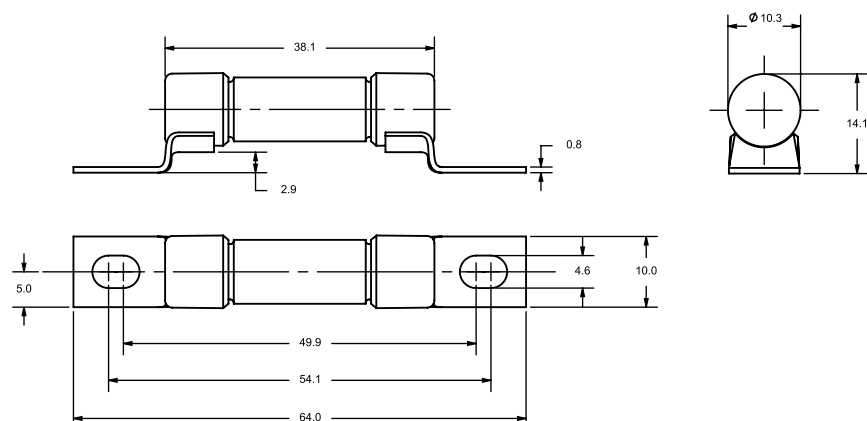
DIMENSIONS

MEV55C Ferrule Fuse (5-50A)



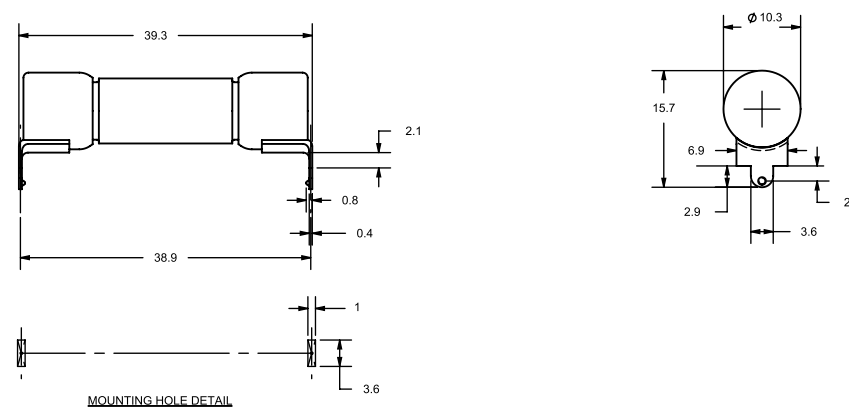
Dimensions in mm

MEV55C -S Surface Mount Fuse (5-50A)



Dimensions in mm

MEV55C -P PC Board Mount (5-50A)



Dimensions in mm

Recommended Mounting Torque and Bolt Size

				Tightening Torque	
Fuse Type	Mounting Style	Fuse Rating	Thread Size	N-m	in-lbs
MEV55C	Surface mount (-S)	5 - 50A	1/4-20	5,5	50

ACCESSORIES



30311



30312



30313

Fuse blocks

Catalog number	Item number	Rated DC voltage	Application DC Fuses	Number of poles/phases	Contact Materials	Wire Range	Weight
Open-style fuse blocks							
Screw w/ double quick connects at both ends							
30310	30310	600 V	MEV55C fuses up to 30A	Extension	Tin-plated Copper	Cu #10-14	42 g
30311	30311	600 V	MEV55C fuses up to 30A	1	Tin-plated Copper	Cu #10-14	47 g
30312	30312	600 V	MEV55C fuses up to 30A	2	Tin-plated Copper	Cu #10-14	80 g
30313	30313	600 V	MEV55C fuses up to 30A	3	Tin-plated Copper	Cu #10-14	0.12 kg
Pressure plate (sems) w/ double quick connects at both ends							
30320	30320	600 V	MEV55C fuses up to 30A	Extension	Tin-plated Copper	Cu #10-14	-
30321	30321	600 V	MEV55C fuses up to 30A	1	Tin-plated Copper	Cu #10-14	96 g
30322	30322	600 V	MEV55C fuses up to 30A	2	Tin-plated Copper	Cu #10-14	93 g
30323	30323	600 V	MEV55C fuses up to 30A	3	Tin-plated Copper	Cu #10-14	0.13 kg
Copper box							
30350	30350	600 V	MEV55C fuses up to 30A	Extension	Tin-plated Copper	Cu #6-14	-
30351	30351	600 V	MEV55C fuses up to 30A	1	Tin-plated Copper	Cu #6-14	49 g
30352	30352	600 V	MEV55C fuses up to 30A	2	Tin-plated Copper	Cu #6-14	-
30353	30353	600 V	MEV55C fuses up to 30A	3	Tin-plated Copper	Cu #6-14	0.13 kg