

## CLM3820 45A Series Device

### Description

Current Limiting Module (CLM) is a chip type surface mountable device that can protect against both overcurrent and overcharging. It comprises a fuse element to ensure stable operation under normal electrical current and to cut off the current when overcurrent occurs. It also comprises a resistive heating element that could be used in combination with a voltage detecting means, such as IC and FET. When overvoltage is detected, the heating element is electrically excited to generate heat to blow the fuse element to achieve overvoltage protection.



### Features

- Halogen-free
- Overcharging protection
- Overcurrent protection
- Surface mountable
- Fast response time

### Application

- Self Balancing
- E-Bike
- Power Tool
- Automotive applications
- Energy Storage systems
- Drone

### Agency Approval and Environmental Compliance

Agency	File Number	Regulation	Standard
	E331807		IEC 61249-2-21:2003
	TA 50428400		

RoHS Directive: Compliance (This product complies with RoHS exemption requirements, since the high melting temperature solder and electronic ceramic parts include Lead.)

### Electrical Specifications

Part Number	I <sub>rated</sub> (A)	Cells in series	V <sub>max</sub> (V <sub>DC</sub> )	I <sub>break</sub> (A)	V <sub>OP</sub> (V)	Resistance		Agency Approval	
						R <sub>heater</sub> (Ω)	R <sub>fuse</sub> (mΩ)		
CLM3820P1245	45	3	80	120	9.8 ~ 13.5	1.9 ~ 3.4	0.4 ~ 2.0	✓	✓
CLM3820P1445	45	4	80	120	13.0 ~ 18.4	3.4 ~ 6.0	0.4 ~ 2.0	✓	✓
CLM3820P2045	45	5	80	120	16.7 ~ 23.5	5.6 ~ 9.9	0.4 ~ 2.0	✓	✓
CLM3820P3045	45	6~7	80	120	22.3 ~ 31.5	10.0 ~ 17.7	0.4 ~ 2.0	✓	✓
CLM3820P4045	45	9~10	80	120	33.0 ~ 46.9	22.0 ~ 38.7	0.4 ~ 2.0	✓	✓
CLM3820P5045	45	12~14	80	120	43.7 ~ 62.0	38.5 ~ 68.0	0.4 ~ 2.0	✓	✓