

MCC's SMLJxxxQ Series: 3000W Auto-Grade TVS Diodes

3000W, 5V TO 85V AUTOMOTIVE TVS



Features

- AEC-Q101 qualified for reliability in automotive systems
- High operating junction temperature up to 175°C
- Peak pulse power of 3000W effectively suppresses transient voltage
- Voltage options ranging from 5V to 85V for versatility
- Unidirectional and bidirectional configurations available



Benefits

A high peak pulse power rating ensures outstanding protection from damaging voltage spikes.

Well-suited for environments where thermal resilience is mission-critical.

Applications



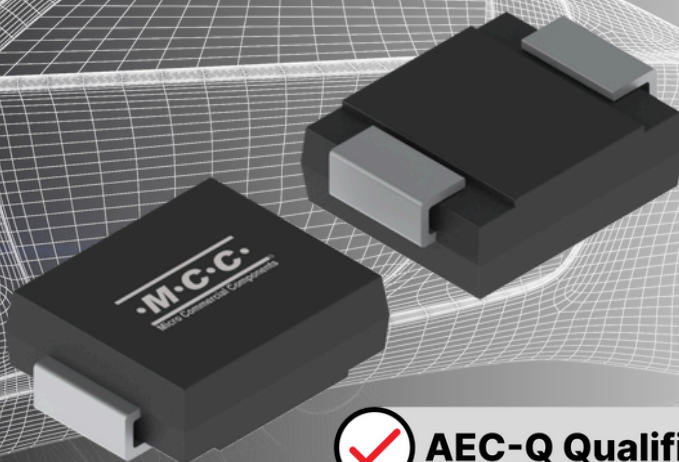
Automotive headlights



Collision avoidance systems

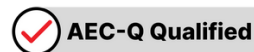
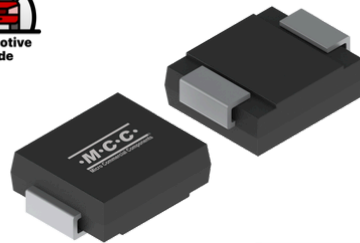


Engine control units (ECUs)



AEC-Q Qualified

5V to 85V Options in Compact SMC Package



Engineered for Diverse Auto Applications

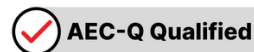
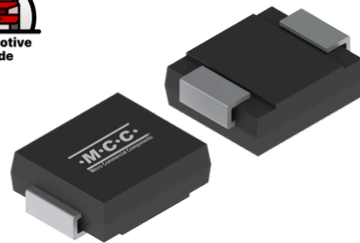
Product Attributes, Parametrics & Datasheets

| Product | Type | Package | Peak Pulse PowerDissipation PPM | Working PeakReverse VoltageVRWM | Configuration | Mounting Type | Datasheet |
|---------------------------|------|---------|---------------------------------|---------------------------------|----------------|---------------------|----------------------|
| SMLJ51AQ | TVS | SMC | 3000W | 51V | Unidirectional | Surface-Mount (SMD) | Info |
| SMLJ54AQ | TVS | SMC | 3000W | 54V | Unidirectional | Surface-Mount (SMD) | Info |
| SMLJ54CAQ | TVS | SMC | 3000W | 54V | Bidirectional | Surface-Mount (SMD) | Info |
| SMLJ58AQ | TVS | SMC | 3000W | 58V | Unidirectional | Surface-Mount (SMD) | Info |
| SMLJ58CAQ | TVS | SMC | 3000W | 58V | Bidirectional | Surface-Mount (SMD) | Info |
| SMLJ60AQ | TVS | SMC | 3000W | 60V | Unidirectional | Surface-Mount (SMD) | Info |
| SMLJ60CAQ | TVS | SMC | 3000W | 60V | Bidirectional | Surface-Mount (SMD) | Info |
| SMLJ64AQ | TVS | SMC | 3000W | 64V | Unidirectional | Surface-Mount (SMD) | Info |
| SMLJ64CAQ | TVS | SMC | 3000W | 64V | Bidirectional | Surface-Mount (SMD) | Info |
| SMLJ75AQ | TVS | SMC | 3000W | 75V | Unidirectional | Surface-Mount (SMD) | Info |

CONTACT MCC TO REQUEST A SAMPLE

mccsemi.com | +818.701.4933





Substantial Peak Pulse Power Rating of 3000W

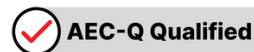
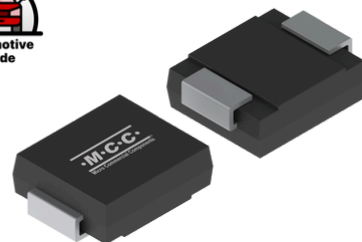
Product Attributes, Parametrics & Datasheets

| Product | Type | Package | Peak Pulse PowerDissipation PPM | Working PeakReverse VoltageVRWM | Configuration | Mounting Type | Datasheet |
|---------------------------|------|---------|---------------------------------|---------------------------------|----------------|---------------------|----------------------|
| SMLJ75CAQ | TVS | SMC | 3000W | 75V | Bidirectional | Surface-Mount (SMD) | Info |
| SMLJ78AQ | TVS | SMC | 3000W | 78V | Unidirectional | Surface-Mount (SMD) | Info |
| SMLJ78CAQ | TVS | SMC | 3000W | 78V | Bidirectional | Surface-Mount (SMD) | Info |
| SMLJ80AQ | TVS | SMC | 3000W | 80V | Unidirectional | Surface-Mount (SMD) | Info |
| SMLJ80CAQ | TVS | SMC | 3000W | 80V | Bidirectional | Surface-Mount (SMD) | Info |
| SMLJ85AQ | TVS | SMC | 3000W | 85V | Unidirectional | Surface-Mount (SMD) | Info |
| SMLJ85CAQ | TVS | SMC | 3000W | 85V | Bidirectional | Surface-Mount (SMD) | Info |

CONTACT MCC TO REQUEST A SAMPLE

mccsemi.com | +818.701.4933





Capable of Operating at Junction Temperatures Up to 175°C

Applications:



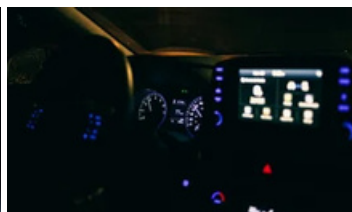
Lighting Systems

- Automotive headlights
- Interior lighting



Advanced Driver Assistance Systems (ADAS)

- Collision avoidance systems
- Lane departure warning systems



Infotainment Solutions

- In-car entertainment systems
- Navigation units



Control Units

- Engine control units (ECUs)
- Transmission control units (TCUs)

CONTACT MCC TO REQUEST A SAMPLE

mccsemi.com | +818.701.4933

