

Circuit Protection for Automotive Industry

Product Snapshot

Overview

Bel Circuit Protection automotive fuses offer high-performance, dependable solutions for protecting electronic systems from overcurrent and short-circuit damage.

Bel fuses meet the stringent requirements of AEC automotive standards, ensuring dependable performance in extreme conditions, making them ideal for protecting circuits, batteries, and onboard chargers in hybrid and electric vehicles.

PTC Resettable Fuses



SMD Series: 0ZT, 0ZCF, 0ZCG, 0ZCH, 0ZCJ, 0ZCK, 0ZCM, 0ZCN

- · AEC-Q200 compliant
- · Resettable PTC devices
- Voltage rating 6 to 60 VDC
- I Hold current range 10 mA to 5 A
- Operating temperature range -40°C to +85°C (extended temp. range up to +125°C for 0TZ Series)
- · Various case sizes 0603 2920

Applications

- · ADAS, audio, eCAll, cameras
- Battery management and onboard diagnostics
- Engine coolant systems and ventilator control
- Ignition system transmission and engine control
- GPS connectivity, navigation, V2X communication
- · Infotainment and virtual dashboard
- · Cabin lighting and headlights
- Plugs, USB ports, cigarette lighter accessories
- ECUs, braking and parking sensor
- · Mirrors, windows, door lock & car seats



Radial Leaded Series: 0ZRA, 0ZRB, 0ZRC, 0ZRE, 0ZRF, 0ZRG, 0ZRM, 0ZRN, 0ZRP, 0ZRR, 0ZRS

- AEC-Q200 compliant
- · Resettable PTC devices
- Voltage rating 16 240 VAC/VDC
- I Hold current range 50 mA to 15 A
- Operating temperature range -40°C to +85°C (extended range up to +125°C for 0ZRN & 0ZRS)
- Available in both fast-acting & time-delay version

Applications

- · ABS systems, ECU, motors
- · Black mox, onboard diagnostics
- · Converter for trailer breaklights
- · HVAC, climate and ventilator control
- Infotainment, navigation, display, antenna
- · Lumbars, tailgates and sunroofs
- Mirrors, windows, door locks and car seats
- · Plugs, cigarette lighter accessories
- · Power outlet and wire harness



Chip Fuses



Slow Blow Series: 0685P, 0685T, 0ABB Fast Acting Series: 0685, 0685F, 0685H, 0686, 0686F

- · AEC-Q200 Compliant
- Surface mount, ceramic / glass construction
- Voltage ratings up to 125 VAC / 63 VDC
- Current ratings up to 50 A
- Operating temperature range -55°C to +125°C
- Various case sizes 0603 2920

Applications

- ABS systems, ECUs, motors, remote keyless entry
- Battery management, cell balancing and protection
- GPS connectivity, navigation, V2X communication
- Headlights, sunroofs, door locks, wire harness
- HVAC and climate control
- Ignition system, transmission and engine control
- Infotainment, display, eCall
- DC output charging, plugs, cigarette lighter socket

Brick Fuses



Slow Blow Series: 0678L, 0680H, 0680L Fast Blow Series: 0678D, 0678H, 0679L, 0679H, 0684L, 0ACF, 0ACG, 0ACH, 0ACJ

- AEC-Q200 Compliant
- Surface mount, ceramic tube/end cap construction
- Voltage ratings up to 1000 VDC
- Current ratings up to 100 A
- Operating temperature range -55°C to +125°C
- · Multiple safety agency approvals

Applications

- · Battery management systems
- DC power supplies
- Lighting
- · Adaptive front lights
- · Power steering
- Power outlet

EV / Power Fuses



500 V Series: 0AFG, 0AKN, 0AKM, 0AKR, 0AKS, 0ALE, 0ALK 750-800 V Series: 0ALB, 0ALC, 0ALD, 0ALF, 0AKJ 1000 V Series: 0AKH, 0AKK, 0AKL, 0ALA, 0ALG 1500 V Series: 0ALL

- Cartridge / Bolt-Down Fuses
- Voltage ratings 500 1500 VDC
- · Current ratings up to 600 A
- Reliability performance according to JASO D622 / ISO 8820-8

Applications

- Charging station to portable charger
- · PDU, battery, main power
- PDU to Aux: DC-DC, heating, brake pump motor, A/C, steering
- Energy storage, main power, auxiliary
- Main fuse