

High-temperature SCRs motorbike applications



With superior High Noise immunity, ST's high-temperature SCRs are perfect for motorbike power switches

Offering designers extra temperature headroom for heatsink reduction or increased power density as well as fully specified voltage surge immunity at 150°C, ST's Silicon Controlled Rectifiers SCRs ensure designs are accurate and secure. Available in through-hole and surface-mount packages, these 12 to 80 A SCRs can be used in motorbike battery rectifier regulators, inrush current limiters, ignitors, headlights, EV charging stations and on-board chargers.

KEY FEATURES

- Temperature: 150 °C (max.)
- On-state RMS current: 12 to 80 A
- Blocking voltages: 600 V, 800 V, and 1200 V
- High turn-on robustness: up to 200 A/μs
- High off-state immunity: up to 1000 V/μs
- ECOPACK2® compliant(*)
- Automotive-grade SCR: AEC-Q101 qualified at 1200 V

KEY BENEFITS

- Compact circuit with high immunity
- Easy design with max. temperature parameters
- Bounce-free and low leakage static switching

KEY APPLICATIONS

- Battery rectifier-regulators
- Capacity discharge ignitors
- Headlights control
- EV charging stations
- On-board-chargers
- Inrush current limiters

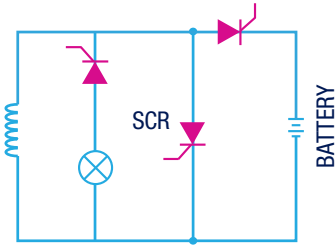


Smart Thyristor Finder app.
for iOS and Android

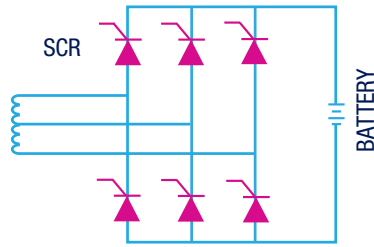
(*) includes compliance to RoHS, Reach and Halogen Free

MOTORBIKE BATTERY RECTIFIER REGULATOR

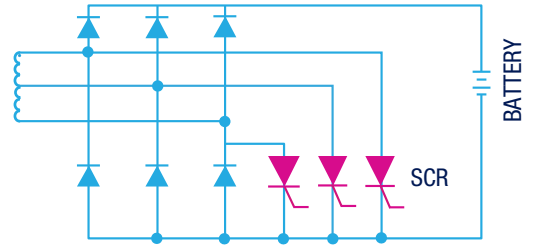
Single Phase bridge
Series + Shunt SCR



3-Phase bridge
Series SCR



3-Phase bridge
Shunt SCR



DEVICE SUMMARY

