HIGH-TEMPERATURE THYRISTORS (SCR)

life.augmented

Motorbike applications

With superior noise immunity, ST's high-temperature thyristors (SCR) 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) also known as thyristors, ensure designs that 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, 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, 800 and 1200 V
- High turn-on robustness: up to 200 A/µs
- High off-state immunity: up to 1000 V/µs
- Lead free plating and Halogen free
- Automotive-grade SCR option: AEC-Q101 qualified at 1200 V

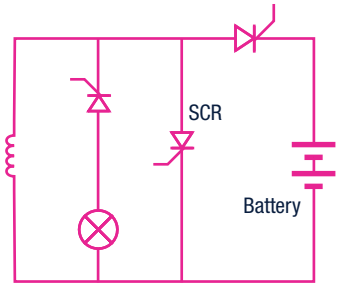
KEY BENEFITS

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

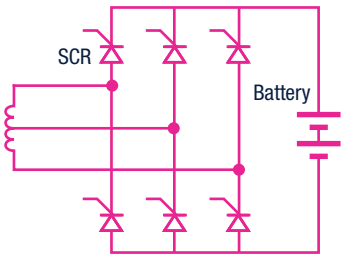
KEY APPLICATIONS

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

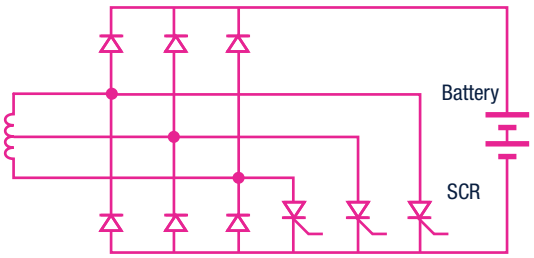
Motorbike battery regulator rectifier



Single phase bridge series + shunt SCR

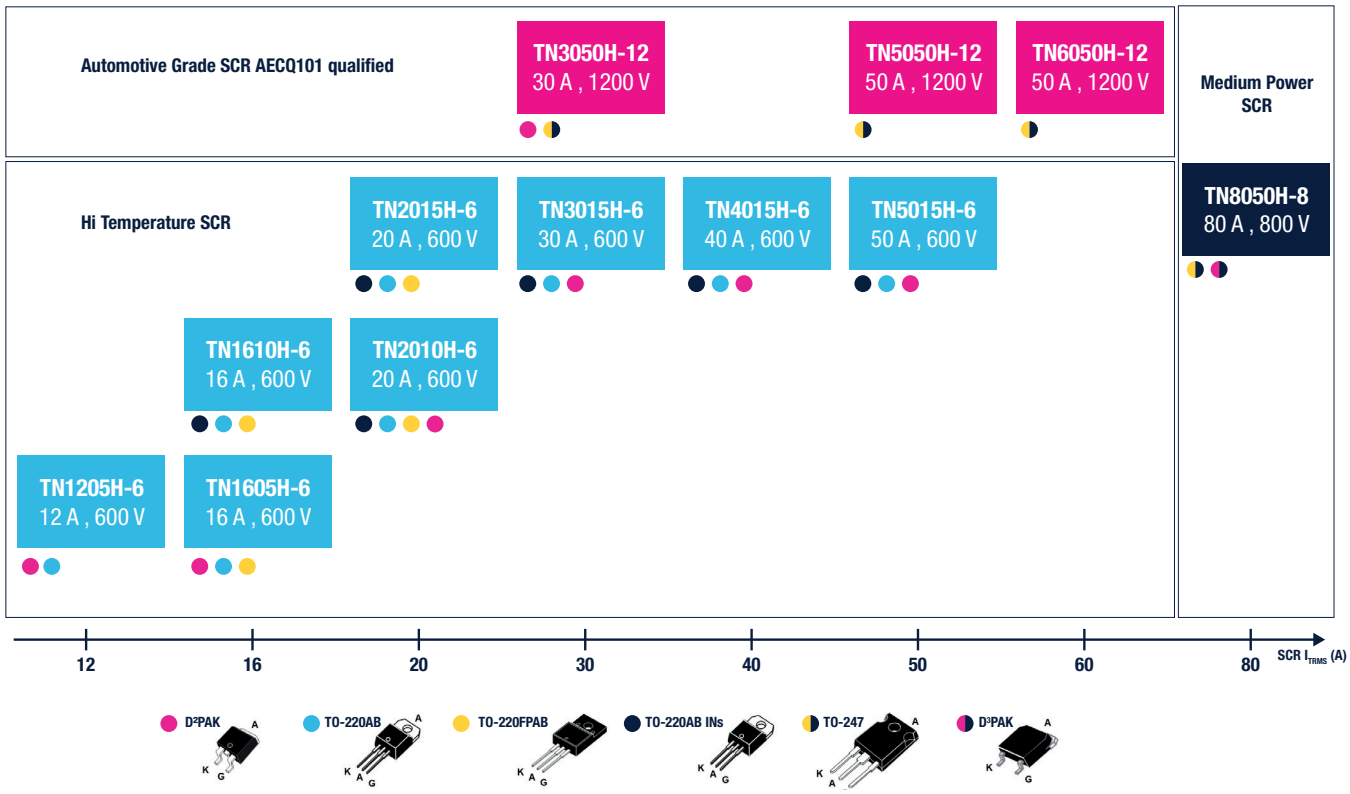


3-Phase bridge Series SCR



3-Phase bridge Shunt SCR

Portfolio overview



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