

TLE 4240-2M/-3M

60 mA Linear LED Driver



Features

- Typical 60 mA constant output current
- Tiny SMD package PG-SCT595-5
- Open load detection (TLE 4240-3M)
- Safe operation area monitoring
- 45 V input voltage max operation range
- Output protected against short circuit to GND and supply
- Reverse polarity protection
- Overtemperature shutdown
- Wide operational temperature range:
 $-40\text{ }^{\circ}\text{C} \leq T_j \leq 150\text{ }^{\circ}\text{C}$

Benefits

- Constant LED brightness
- Extended LED lifetime
- Protection of LED devices in automotive applications
- Diagnostic capability
- Small footprint
- RoHS compliant



THE TLE 4240-2/3M is a low dropout linear LED Driver designed to supply constant current to white or color 70 mA max. LED Types (i.e. Power TOPLEDs) independently from supply voltage or LED forward voltage class. This provides appropriate operating conditions to the connected LEDs, enabling constant brightness and ensuring extended LED lifetime.

Moreover the connected LEDs are protected against reverse polarity transients as well as against input voltages up to 45 V. Protection circuits prevent from damage to the LED driver in case of overload, short circuit, reverse polarity and overheat. The Safe Operation Area (SOA) monitoring function limits the output current in case of a very high drop voltage across the regulator.

Two versions are provided:

- the TLE 4240-3M, with a status output pin indicating an open load failure condition
- the TLE 4240-2M, equivalent to the TLE 4240-3M, without open load failure detection

The TLE 4240-2/3M LED drivers are supplied in a space-saving PG-SCT595-5 package offering minimal thermal resistance.

Applications

- All automotive applications using 70 mA colour and white LEDs:
 - interior lighting
 - position lights
 - design lighting

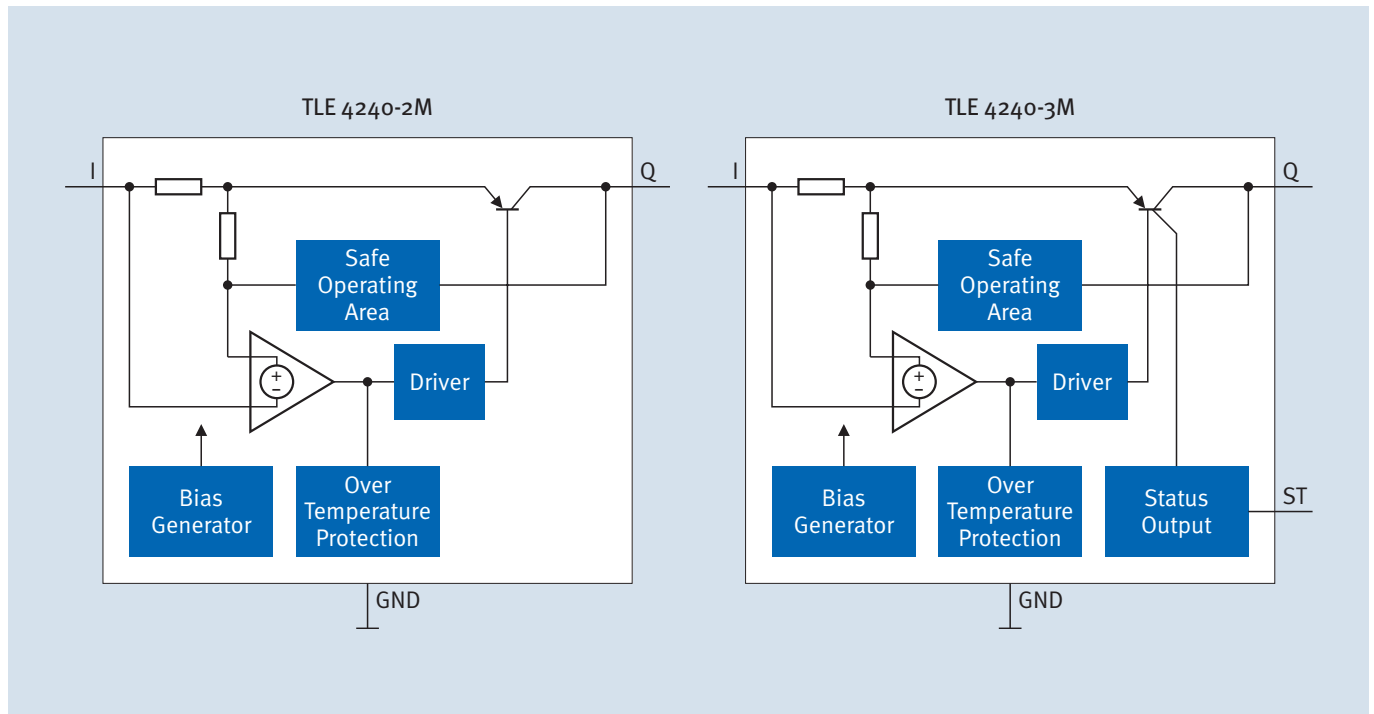
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Power Semiconductors

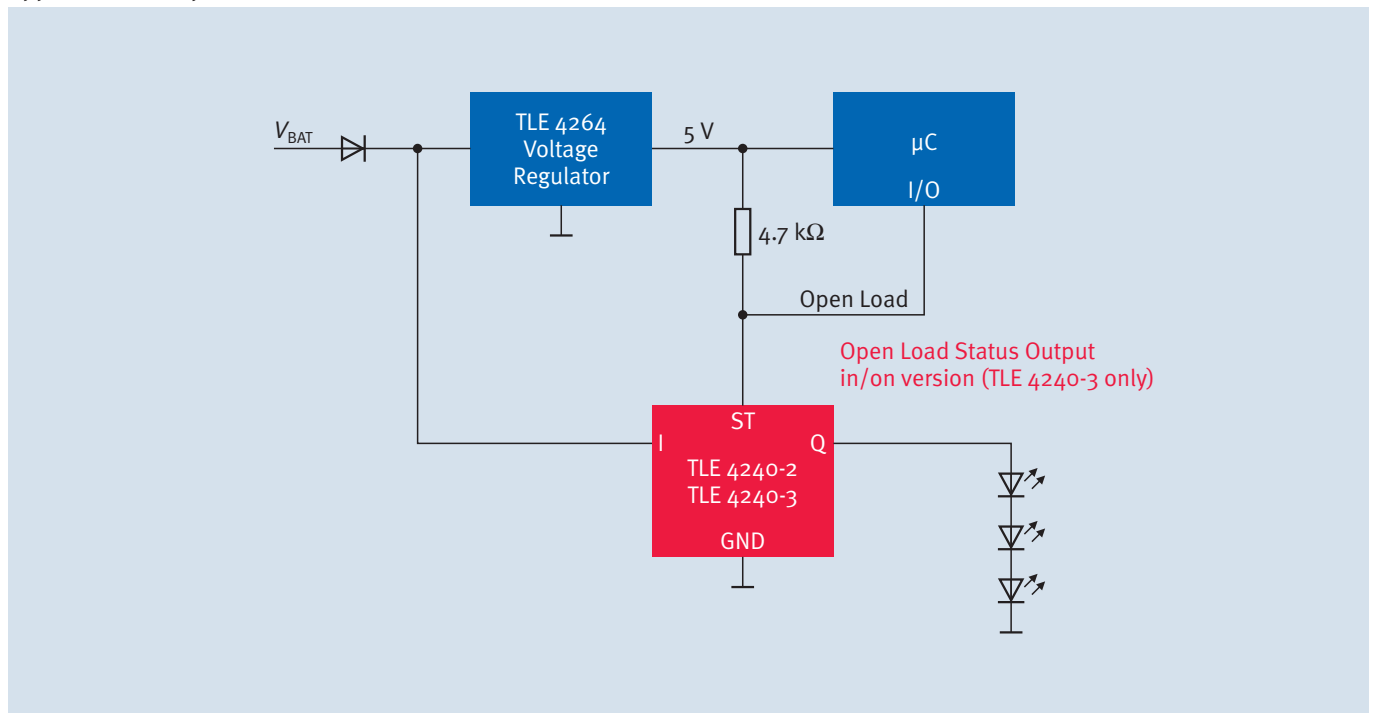


Never stop thinking

Block Diagram



Application Example



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Published by
 Infineon Technologies AG
 81726 Munich, Germany

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