

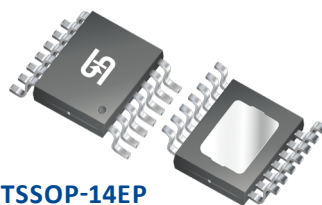
TQL820CA14V33, TQL820CA14V50

AEC-Q100, 200mA, Low- I_Q 40 μ A Low-Dropout Regulator with Enable, Reset, Watchdog Functions

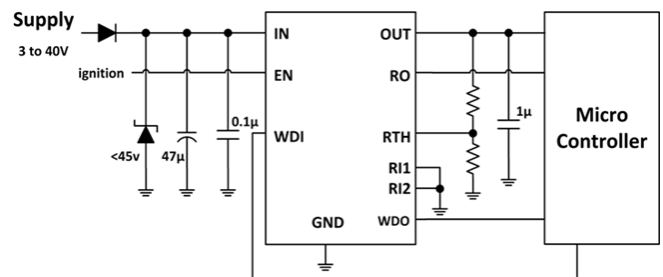
The [TQL820CA14V33_V50](#) series are high-performance low dropout voltage regulator for 3.3V and 5V with input range of 3V to 50V and low quiescent 40 μ A. [TQL820CA14V33_V50](#) provides 2% output voltage accuracy and 200mA maximum driving current and is suitable for automotive or other supply systems.

[TQL820CA14V33_V50](#) just requires one small ceramic capacitor of 1 μ F to exhibit fast regulation and good stability. And it shows very low-dropout voltage with 70mV in 100mA-load and 110mV in 200mA-load. The start operating voltage is 3V which is suitable to cranking condition of automotive system.

The device has enabled function to switch ON and OFF for power dissipation. And there is Reset function to monitor output voltage for UVLO reset and power-ON delay reset with adjustable lower reset threshold function. The built-in watchdog function monitors microcontroller's operation with flexible timings. And other protection functions such as thermal-shutdown and current-limit are against immediate damage.



TSSOP-14EP



KEY FEATURES & ADVANTAGES:

- AEC-Q100 qualified with the following results:
 - Device temperature grade 1: -40°C to 125°C
 - Device HBM ESD classification level H2
 - Device CDM ESD classification level C3
- 3V to 50V Input Voltage Range
- 3.3V Fixed Output Voltage
- 70mV@100mA Low Dropout Voltage
- 200mA Output Current
- Typical 40 μ A Low Quiescent Current
- Typical \pm 2% Output Voltage Accuracy
- 1 μ F Ceramic Output Stable Capacitor
- Programmable Delayed Reset timing at Power-On
- Adjustable Reset Threshold Voltage
- Flexible Watch-dog Timing and Current Dependent Deactivation
- Output Current Limit
- Enable, Under-voltage Reset
- Over Temperature Protection
- RoHS Compliant
- Halogen-Free according to IEC 61249-2-21

APPLICATIONS:

- Automotive Power Supply Systems
- General Power Supply applications

ORDERING INFORMATION:

Ordering Part Number	Outline [Package]	Reel [PCS]	Reel Size [Inch]	Inner Box [PCS]	Carton [PCS]	Carton Size [PCS]	Gross Weight [Kg/ Carton]
TQL820CA14V33 RLG	TSSOP-14EP	2,500	13"	5,000	25,000	383 x 285 x 390	7.74
TQL820CA14V50 RLG	TSSOP-14EP	2,500	13"	5,000	25,000	383 x 285 x 390	7.74

For pricing and more information, please contact TSC sales or authorized distributors.