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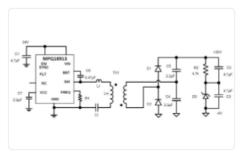
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MPQ18913

30V, 0.3A, High-Frequency, Automotive LLC Transformer Driver for Isolated Power Supplies, AEC-Q100

Pre-Release













Description

The MPQ18913 is a high-frequency, half-bridge transformer driver, designed as a solution for primary-side switchers in isolated power supplies. Its two integrated switching FETS allow the device to support up to 300mA of average input current ($I_{\rm IN}$) across a wide 5V to 30V input voltage ($V_{\rm IN}$) range.

The device features a wide configurable switching frequency $\{f_{SW}\}$ range, which is useful for resonant topologies, such as LLC converters. Full protection features include input over-voltage protection (OVP), over-current protection (OCP), and fault indication. The MPQ18913 also features built-in soft start (SS) to control the inrush current during startup.

The MPQ18913 is available in a QFN-10 (2mmx2.5mm) package with wettable flanks.

Show less A

Features & Benefits

- ✓ High Performance:
 - Half-Bridge Transformer Driver for Isolated LLC Resonant Converters
 - Configurable Switching Frequency (f_{SW}), Up to 5MHz
 - Frequency Spread Spectrum (FSS) for Reduced EMI
 - Supports Up to 6W of Output Power
 - 5V to 30V Input Voltage (V_{IN}) Range

- ▼ Robust Design for Automotive Environments:
 - $\circ~$ -40°C to +150°C Junction Temperature (T_J) Range
 - Available in a Tiny QFN-10 (2mmx2.5mm) Package
 - Available in a Wettable Flank Package to Enable Optical Inspection
 - Available in AEC-Q100 Grade 1