

EV6910A-S-00A

High Efficiency Synchronous Rectification EV Board

The Future of Analog IC Technology

DESCRIPTION

The EV6910A-S-00A is an evaluation board for the MP6910A. It is configured to provide synchronous rectification solution for Flyback converters.

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Value	Units	
Supply Voltage	V _{DD}	8–24	V	

FEATURES

- Integrated 15mΩ 100V Power Switch
- Compatible with Energy Star, 1W Standby Requirements
- V_{DD} Range From 8V to 24V
- 65mV V_{DS} Regulation Function ⁽¹⁾
- Max 250kHz Switching Frequency
- Light Load Mode Function ⁽¹⁾ with <300uA Quiescent Current
- Supports High-side and Low-side Rectification
- Power Savings of Up to 1.5W in a Typical Notebook Adapter

APPLICATIONS

- Industrial Power Systems
- Distributed Power Systems
- Battery Powered Systems
- Flyback Converters

All MPS parts are lead-free, halogen free, and adhere to the RoHS directive. For MPS green status, please visit MPS website under Quality Assurance.

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EV6910DZ-00A EVALUATION BOARD



(L x W x H) 0.9" x 0.9" x 0.6" 2.3cm x 2.3cm x 1.4cm

Board Number	MPS IC Number		
EV6910A-S-00A	MP6910A		

EVALUATION BOARD SCHEMATIC



EV6910DZ-00A BILL OF MATERIALS

RefDes	Value	Description	Package	Manufacturer	Manufacturer_PN
C1	2.2uF	Ceramic Capacitor;50V;X7R	0805	TDK	C2012X7R1H225K
C2	NC	Snubber Capacitor	0805		
R1	1kΩ	Film Resistor;1%	0603	Yageo	RC0603FR-071KL
R2,R3	NC	Snubber Resistor	1206		
U1	MP6910A	Smart Synchronous Rectifier	SOIC8	MPS	MP6910AGS-Z



PRINTED CIRCUIT BOARD LAYOUT



Figure 1—Top Layer

QUICK START GUIDE

- 1. Connect the positive and negative terminals of the output or the auxiliary winding to the V_{DD} and V_{S} pins, respectively.
- 2. Parallel the V_S pin and V_D pin as the Source and Drain of SR Mosfet in the flyback circuit.
- 3. Preset the input voltage of flyback converter to the normal input range, and then turn off the power supply.
- 4. Turn the power supply on. The IC will automatically starts up and works as an ideal diode.

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