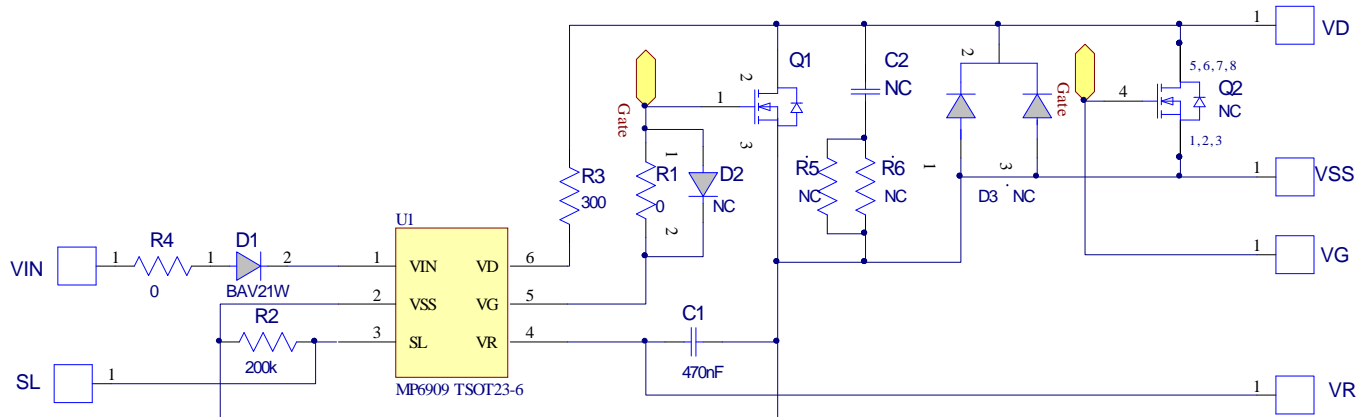


EVALUATION BOARD SCHEMATIC



BILL OF MATERIALS

Qty	RefDes	Value	Description	Package	Manufacturer	Manufacturer P/N
1	C1	470nF	Ceramic Capacitor;25V;X7R	0805	TDK	C2012X7R1E474K
0	C2	NC	Snubber Capacitor	0805		
2	R1 ,R4	0	Film Resistor;1%	0603	Yageo	RC0603FR-070RL
1	R2	200k	Film Resistor;1%	0603	Yageo	RC0603FR-07200KL
1	R3	300	Film Resistor;1%	0603	Yageo	RC0603FR-07300RL
0	R5,R6	NC	Snubber Resistor	1206		
1	D1	BAV21W	Diode,200V	SOD-123	Diodes	BAV21W-7-F
1	U1	MP6909	Smart Synchronous Rectifier	TSOT23-6	MPS	MP6909GJ-Z
1	Q1	FDPF045N10A	MOSFET;100V,67A	TO220-3	Fairchild	FDPF045N10A
0	D2,D3, Q2,SL	NC				
3	VG,VIN, VR	1mm Connector Pin				
2	VD,VSS	2mm Connector Pin				

PRINTED CIRCUIT BOARD LAYOUT

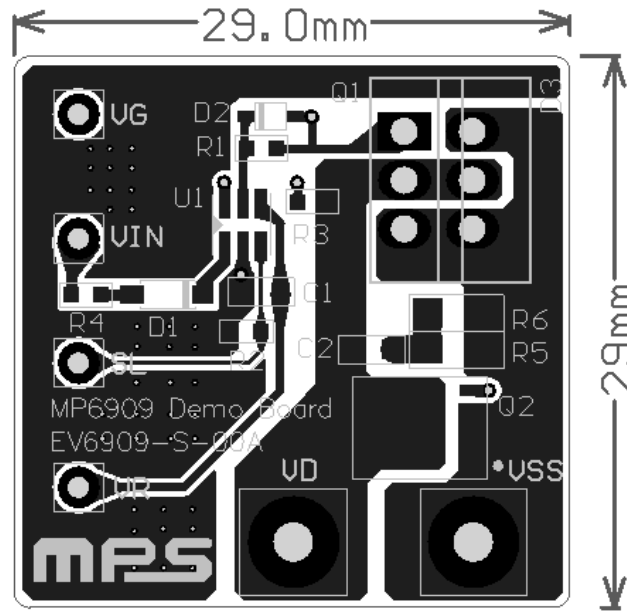


Figure 1: Top Layer

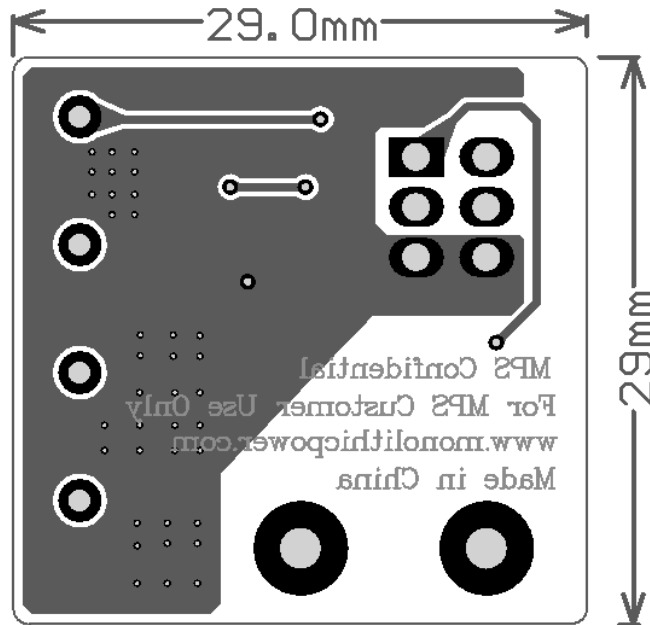


Figure 2: Bottom Layer

QUICK START GUIDE

1. Connect the VSS and VD pin into the flyback circuit to replace the freewheel diode.
2. Connect VIN to a position which can supply a direct voltage (5V to 40V).
3. Turn the power supply on. The IC will start up and work as a freewheel diode.

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