

## LED lighting controll ICs **MV1002SC**

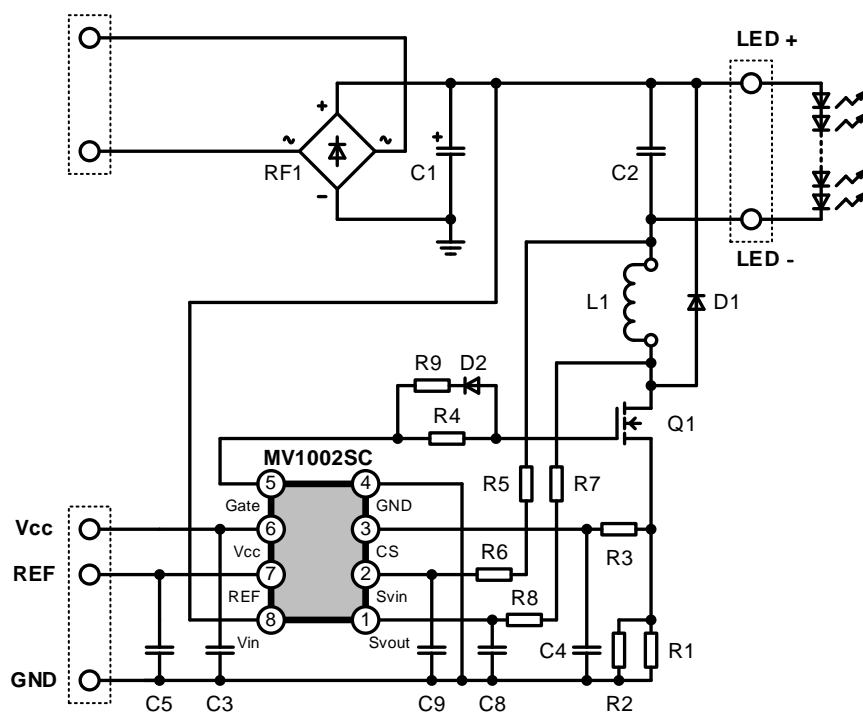
### Rectification method : current critical (low-side switch)

Input voltage	AC 187~276V
Output voltage	DC 80V
Output current	0.3A max.
Frequency	85kHz typ.
Vcc voltage	14V typ.

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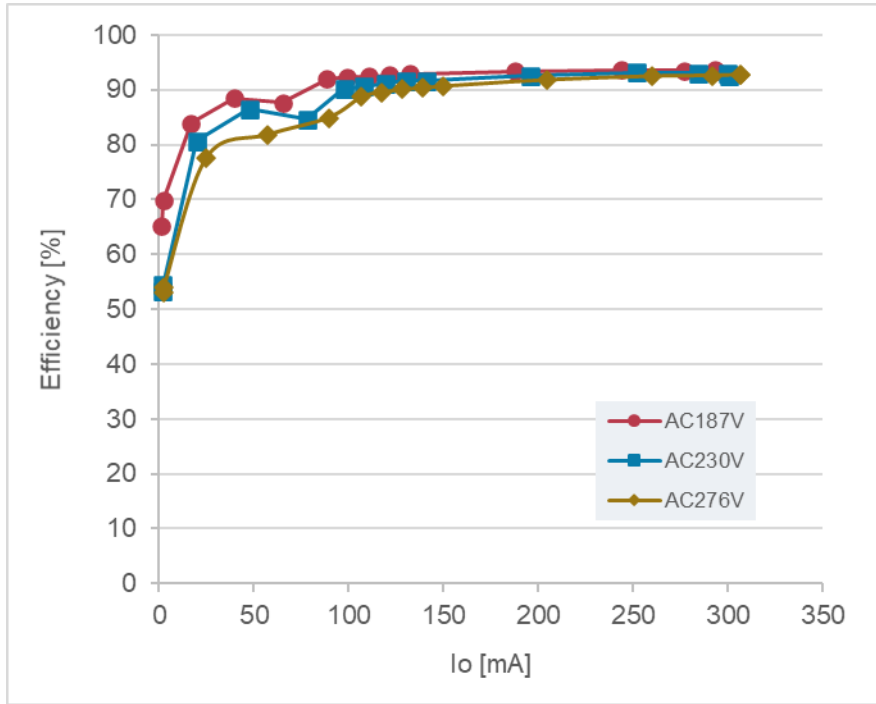
**Reference circuit diagram**



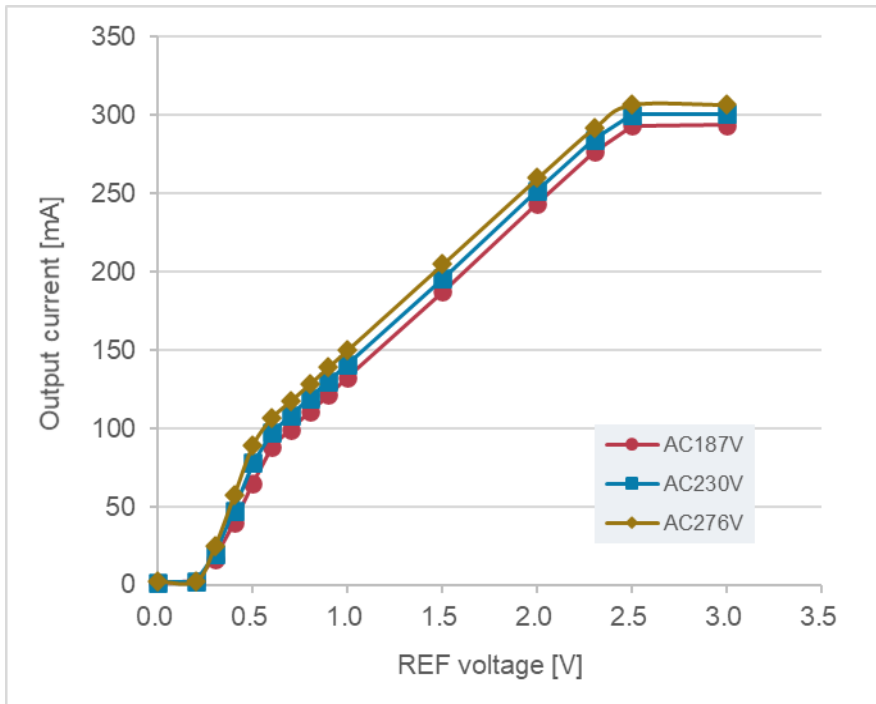
**Bill Of Material**

No.	Type	Qt'y	Spec	Model Name	Vendor	Remarks
L1	Choke Coil	1	1 mH 0.59 A	SHP1280P-F102A	TCE	-
Q1	Power MOSFET	1	525 V 5 A	P5B52HP2	SHINDENGEN	-
RF1	Bridge Diode	1	800 V 1 A	D1UBA80	SHINDENGEN	-
D1	FRD	1	600 V 0.8 A	D1FK60	SHINDENGEN	-
D2	SBD	1	30 V 3 A	M1FM3	SHINDENGEN	-
C1	Electrolytic Capacitor	1	450 V 10 uF	450PX10M	Rubycon	-
C2	Electrolytic Capacitor	1	450 V 1 uF	450PX1M	Rubycon	-
C3	Ceramic Capacitor	1	50 V 0.1 uF	C1608X7R1H104K	TDK	-
C4	Ceramic Capacitor	1	50 V 82 pF	C1608CH1H820J	TDK	-
C5	Ceramic Capacitor	1	50 V 1000 pF	C1608X7R1H102K	TDK	-
C8	Ceramic Capacitor	1	50 V 10 pF	C1608CH1H100J	TDK	-
C9	Ceramic Capacitor	1	50 V 1000 pF	C1608X7R1H102K	TDK	-
R1	Chip Resistor	1	1/8 W 1 Ω	SR73 2A T TD 1R0 F	KOA	1%
R2	Chip Resistor	1	1/8 W 4.7 Ω	RK73H 2A T TD 4R7 F	KOA	1%
R3	Chip Resistor	1	1/10 W 1 kΩ	RK73B 1J T TD 102 J	KOA	-
R4	Chip Resistor	1	1/8 W 100 Ω	RK73B 2A T TD 101 J	KOA	-
R5	Chip Resistor	1	1/8 W 2.7 MΩ	RK73B 2A T TD 275 J	KOA	-
R6	Chip Resistor	1	1/8 W 300 kΩ	RK73B 2A T TD 304 J	KOA	-
R7	Chip Resistor	1	1/8 W 2.2 MΩ	RK73B 2A T TD 225 J	KOA	-
R8	Chip Resistor	1	1/8 W 1 MΩ	RK73B 2A T TD 105 J	KOA	-
R9	-	-	-	short	-	-

**Efficiency**



**Output characteristics**



\* Characteristics may vary slightly depending on filter component constants. Please check with the actual filter circuit.