

## Product Overview:

**RM3602AS** is a low power AC/DC converter with high performance in constant voltage and constant current control.

**RM3602AS** operates in primary-side sensing and regulation. Consequently, opto-coupler and TL431 could be eliminated.

**RM3602AS** current and output power are regulated by the CS pin external resistor in constant current (CC) operation mode. In constant voltage (CV) mode of operation, **RM3602AS** can achieve high performance and high efficiency through multiple modes operate. In addition, it can achieve high load regulation from the built-in line fill function. The device operates uses pulse frequency modulation (PFM) under constant current overload conditions , and pulse width modulation (PWM) under constant current light / medium load conditions with frequency reduction.

**RM3602AS** integrates multiple functions and protection features including cycle-by-cycle current limit, VDD over voltage protection (OVP), feedback loop protection, short circuit protection (OLP), VDD under voltage lockout (UVLO), over temperature protection (OTP) blanking, automatic recovery and so on.

**RM3602AS** is offered in SOP-7 packages.

## System Specifications: 5V/2A

Input Voltage	85Vac-265Vac		Output Voltage	10W
Power Tube	650V/2A		Efficiency	≥80%
CV tol.	≤±3%		Standby Power Consumption	< 75mW
CC tol.	≤±3%		Transformer	EE16

## Typical Application:

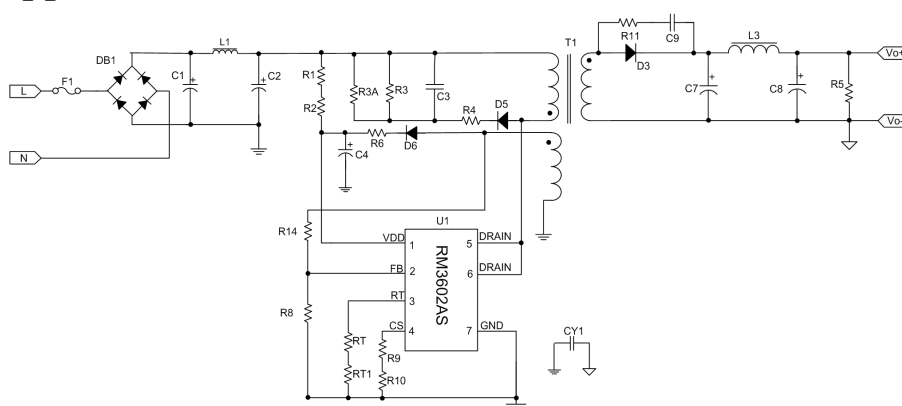


Figure 1. system application schematic

**BOM of the system:**

No	Component	Specification Models	Amount	Location number	Packaging Requirements
1	Fuse	250V,1A	1	F1	DIP
2	SMD Resistor	2.2MΩ, 0.125W ±5%,	1	R1	SMD0805
3	SMD Resistor	1.5MΩ, 0.125W ±5%,	1	R2	SMD0805
4	SMD Resistor	200KΩ 0.125W ±5%,	2	R3 R3A	SMD0805
5	SMD Resistor	47Ω, 0.25W ±5%,	1	R4	SMD1206
6	SMD Resistor	1KV, 0.125W ±5%,	1	R5	SMD0805
7	SMD Resistor	2.2Ω, 0.125W ±5%,	1	R6	SMD0805
8	SMD Resistor	1.8Ω, 0.25W ±5%,	2	R9	SMD1206
9	SMD Resistor	1.2Ω, 0.25W ±5%,	2	R10	SMD1206
10	SMD Resistor	4.3KΩ, 0.125W ±5%,	2	R8	SMD0805
11	SMD Resistor	10Ω, 0.25W ±5%	1	R11	SMD1206
12	SMD Resistor	1.5KΩ, 0.125W ±1%	1	R14	SMD0805
13	SMD Resistor	20Ω 0.125W ±1%	1	R12	SMD0805
14	SMD Resistor	200KΩ 0.125W ±5%,	1	RT	SMD0805
15	SMD Resistor	30Ω, 0.125W ±5%	1	RT1	SMD0805
16	Electrolytic Capacitor	15μF,400V,±10%,	1	C1	DIPΦ10*17mm
17	Electrolytic Capacitor	6.8μF,50V,±10%,	1	C2	DIPΦ10*17mm
18	Chip Capacitor	1nf,±10%	1	C3	DIP
19	Electrolytic Capacitor	10μF,50V,±10%	1	C4	DIPΦ5*11mm
20	Electrolytic Capacitor	1000μF,10V,±10%,	2	C6 C7	DIPΦ8*12mm
21	Chip Capacitor	1nF,50V,±10%	1	C9	SMD0805
22	Chip Capacitor	0.1μF,50V,±10%	1	C10	SMD1206
23	Y Capacitor	2.2nF, 400V,±20%,	1	CY1	DIP
24	Output Diode	SR540,5A,40V	1	D3	DIP
25	Chip Diode	RS1M,1A,1KV	2	D5	DO-214AC
26	Chip Diode	A7,0.5A,1KV	1	D6	SMD
27	Rectifier Bridge	MB6F,1A,600V	1	BD1	SOP-4
28	DM Inductance	1mH,±10%	1	L1	DIPΦ7*8
29	Bar Inductance	2.4μH,±10%	1	L3	3*15mm
30	IC	RM3602AS	1	U1	SOP7
31	Transformer	EF20,4*4PIN	1	T1	DIP

DEMO:

