



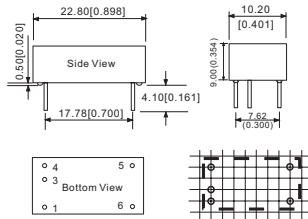
## KC24AH Series

### PWM DIM CONSTANT CURRENT OUTPUT LED DRIVER

RoHS

#### FEATURES

- Wide input voltage range
- Constant current mode, great power output
- High efficiency up to 95%
- PWM dimming
- Remote ON/OFF
- Short circuit protection



KC24AH SIZE: 22.80x10.20x9.5(mm)

#### FOOTPRINT DETAILS

Pin	Function	Comments
1	Vin	DC Supply
3	ON/OFF/PWM	Leave open if not use
4	GND	Do not connect to -Vout
5	-Vout	LED Cathode connection
6	+Vout	LED Anode connection

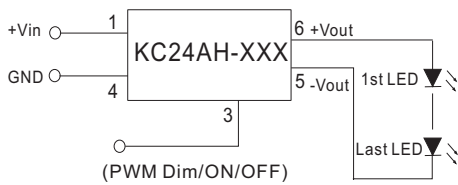
#### SPECIFICATIONS

Output current accuracy: Vin=24V, 5 LEDS.....±5%(typ)  
 Output current stability: Vin=24V, 1LED to 5 LEDS.....±5%(typ)  
 Maximum capacitive Load.....470 μ F  
 Temperature coefficient: -40°C ~+71°C ambient.....±0.03%/°C(max)  
 Storage temperature range.....-55°C~+125°C  
 Remote pin current: Vc=5V.....1mA(max)  
 PWM frequency.....10KHz(max)  
 Short circuit protection.....Continuous  
 Internal power dissipation.....0.7W

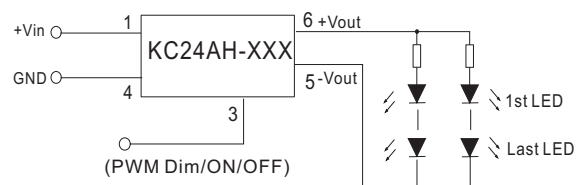
Part Number	Vin (VDC)	Input Range (VDC)	Vout (VDC)	Iout (mA)	Dimming control	Eff(typ) %
KC24AH-300	24	5.5-36	2-32	0-300	PWM	95
KC24AH-350	24	5.5-36	2-32	0-350	PWM	95
KC24AH-500	24	5.5-36	2-32	0-500	PWM	95
KC24AH-600	24	5.5-36	2-32	0-600	PWM	95
KC24AH-700	24	5.5-36	2-32	0-700	PWM	95

#### TYPICAL APPLICATION CIRCUITS

Figure 1: PWM Dimming control circuit



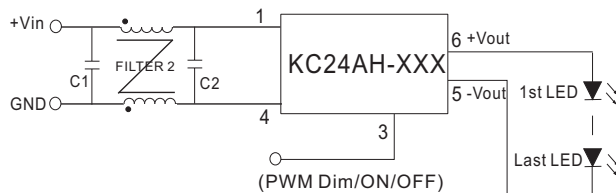
(Figure 1) Series Application



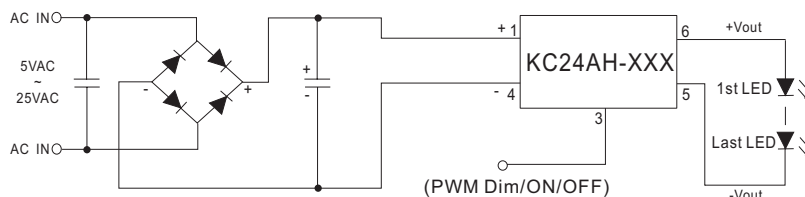
(Figure 2) Parallel-series Application

In actual use, if necessary to protect LED, a PTC of positive temperature coefficient may be connect to the input end of every channel or all channels, as shown in Figure 2.

#### EMC RECOMMENDED CIRCUIT



#### AC INPUT RECOMMENDED CIRCUIT



AC-DC SERIES

DC-DC FIXED INPUT ISOLATED/UNREGULATED

DC-DC FIXED INPUT ISOLATED/REGULATED

DC-DC WIDE INPUT ISOLATED/REGULATED

DC-DC ULTRA-WIDE INPUT ISOLATED/REGULATED

DC-DC WIDE INPUT NON-ISOLATED/REGULATED

LED DRIVER

IGBT DRIVER

ISOLATION AMPLIFIER MODULE



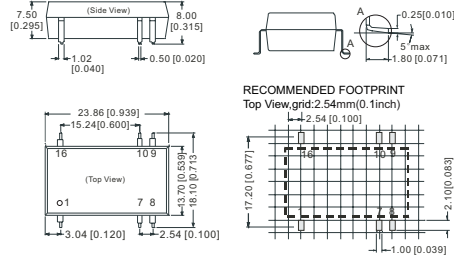
# LED Driver

RoHS

## KC24RT Series CONSTANT CURRENT GREAT POWER LED DRIVER

### FEATURES

- Ultra wide range voltage input and output
- Constant current mode, great power output
- High efficiency up to 96%
- PWM dimming & Analogue dimming
- Power LED driver
- Remote ON/OFF
- Continuous short circuit protection
- SMD package



KC24RT Size: 23.86x13.7x8.50mm

Pin	Function
1	GND
7	ON/OFF/PWM
8	-Vout
9	+Vout
10	Analogue Dim
16	Vin

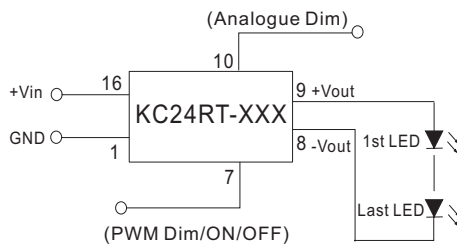
### SPECIFICATIONS

Output current accuracy:  $V_{in}=24V$ , 5 LEDs.....  $\pm 2\%$  (typ)  
 Output current stability:  $V_{in}=48V$ ,  $V_o=3.3\sim 36V$ .....  $\pm 1\%$  (typ)  
 Maximum capacitive Load..... 1000  $\mu F$   
 Temperature coefficient:  $-40^{\circ}C \sim +71^{\circ}C$  ambient.....  $\pm 0.015\%/^{\circ}C$  (max)  
 Storage temperature range.....  $-55^{\circ}C \sim +125^{\circ}C$   
 Remote pin current:  $V_c=5V$ ..... 1mA(max)  
 PWM frequency..... 200Hz(max)  
 Analogue dimming voltage:  $V_{in}=5.5\sim 48V$ ..... 0~15V  
 Conducted/Radiated..... EN55022, CLASS B  
 ESD/EFT/Surge..... Level 3  
 Short circuit protection..... Continuous  
 Internal power dissipation..... 0.7W

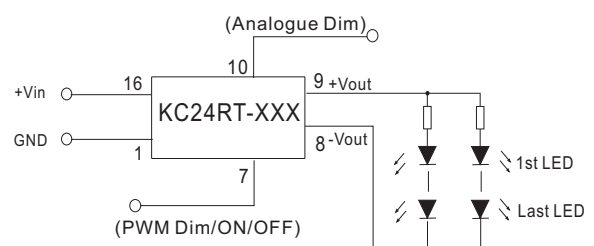
Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Dimming control	Efficiency (typ)%
KC24RT-300	5.5-48	3.3-36	0-300	PWM+Analogue	96
KC24RT-350	5.5-48	3.3-36	0-350	PWM+Analogue	96
KC24RT-500	5.5-48	3.3-36	0-500	PWM+Analogue	96
KC24RT-600	5.5-48	3.3-36	0-600	PWM+Analogue	96
KC24RT-700	5.5-48	3.3-36	0-700	PWM+Analogue	96

### TYPICAL APPLICATION CIRCUITS

Figure 1: PWM Dimming control circuit



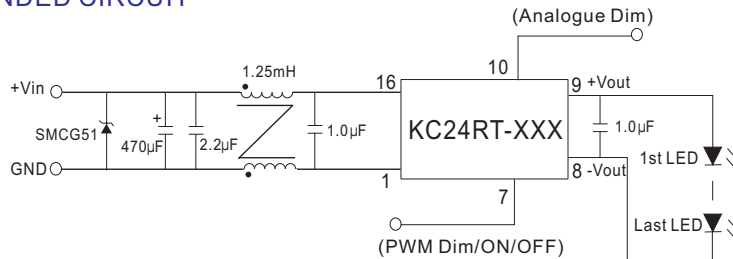
(Figure 1) Series Application



(Figure 2) Parallel-series Application

If it is necessary to protect LED in actual application, you could connect a PTC to the input of every channel or all channels, as shown in Figure 2.  
 Note: The negative output terminal can't connect GND, or the module may be damaged.

### EMC RECOMMENDED CIRCUIT



### AC INPUT RECOMMENDED CIRCUIT

