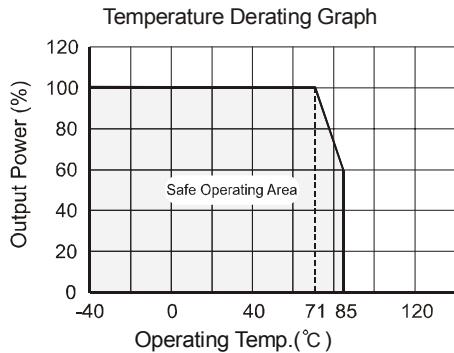




## COMMON SPECIFICATION

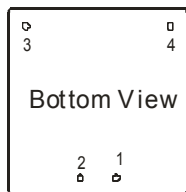
Output Short Circuit Protection	Continuous
Temperature Rise at Full Load	30°C (TYP)
Cooling	Free Air Convection
No-load Power Consumption	500mW (typical)
Operating Temperature Range	-20°C~+71°C
Storage Temperature Range	-55°C~+125°C
Lead Temperature***	300°C Max.
Storage Humidity Range	≤ 95%
Case Material	Plastic (UL94-V0)
MTBF	>1,000,000 hours
***Lead Temperature 1.5mm from case for 10 seconds.	

## TYPICAL CHARACTERISTICS



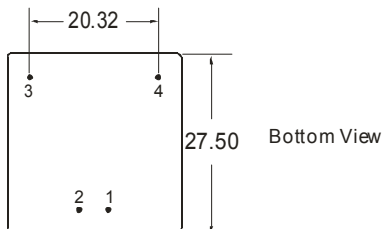
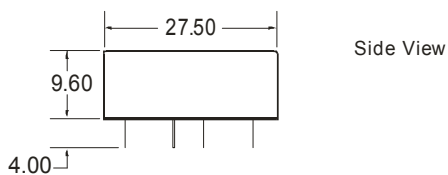
## FOOTPRINT DETAILS

Pin	Function
1	GND
2	Vin
3	+Vo
4	NC

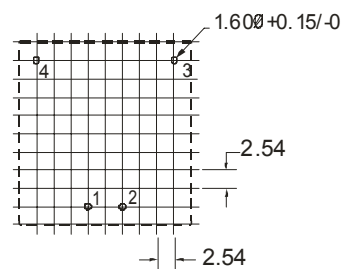


## OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT

KRBXXXXD-3W /10W Package



KRBXXXXD-3W /10W Footprint



Note: All Pins on a 2.54mm pitch; All Pin diameters are 0.80 mm (Tolerance: ±0.1); All dimensions in mm.

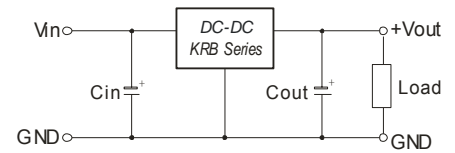
## APPLICATION NOTE

### Recommended Circuit

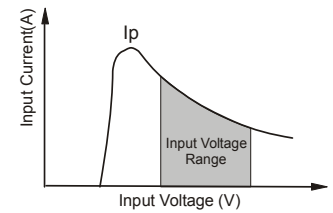
All the KRB\_D-3W/10W Series have been tested according to the following recommended testing circuit before leaving factory. This series should be tested under load. Never be tested under no load (See Figure 1 & 2). If you want to further decrease the input/output ripple, you can increase capacitance properly or choose capacitors with low ESR. However, the capacitance should not be too high. (See table 1). If you want to use the products in high EMI, please choose our metal packaged products.

### Input Current

When it is used in unregulated power supply, be sure that the fluctuating range of the power.



(Figure 1)



(Figure 2)

supply and the rippled voltage do not exceed the module standard. Input current of power supply should afford the startup current of this kind of DC/DC module. (See figure 2)

### External Capacitor

Although this series of DC/DC converter can work without external capacitor, in order to keep an optimum performance, however, it needs external capacitor. (See Table 1)

**The products cannot be used in parallel.**

External Capacitor Table (See Table 1)

Vin	Cin	Cout (0+70°C)	Cout (-40+85°C)
5V & 12V	100uF	100uF (electrolytic capacitor)	47uF (tantalum capacitor)
24V & 48V	10uF		



**MORNSUN Science & Technology Ltd.**

Address: 8th Floor 8th Building, Huangzhou Industrial District, Guangzhou, China  
Tel :86-20-38601850  
Fax:86-20-38601272  
Http:// www.mornsun-power.com