

Features

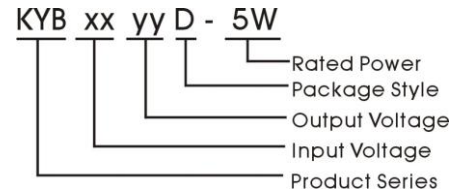
- ★ DIP Package
- ★ Temperature Range:-40℃ to +85℃
- ★ UL94V-0 Inflamming retarding package
- ★ MTBF>1million hours(25℃)
- ★ Short-circuit protection
- ★ Output Short Circuit Protection



Applications

The KYB_D-5W Series are specially designed for applications where a wide range input voltage power supplies are isolated from the input power supply in a distributed power supply system on a circuit board. For these DC-DC converters, you can reduce the design point of failure and save the development of micro power supply's manpower, material and time costs, also better ensure product quality stability, protect safety and reliability of the end of products. These products apply to where:

1. Input and output isolation noise is required.
 2. Regulated and low ripple noise is required.
- Such as: tele-communications etc, industrial control.



Model Detail List Specification

Model Number	Input Voltage	Output Voltage	Output Current (mA)		Input Current Max.	Efficiency	Max. Capacitive Load(μF)
			Min.	Max.			
KYB0503D-5W	5~9V	3.3V	150	1500	1164	85%	1520
KYB0705D-5W	6.5~9V	5.0V	100	1000	811	88%	1020
KYB1203D-5W	9~18V	3.3V	150	1500	196	83%	1520
KYB1205D-5W	9~18V	5.0V	100	1000	490	85%	1520

Output Specifications

Item	Test Conditions	Min.	Typ.	Max.	Unit
Output Power		0.5		5	W
Line Voltage Regulation	For Vin change of ±1%			±0.25	%
Load regulation	10% to 100% load			0.5	
Ripple	20MHz Bandwidth		50		mVp-p
Noise			75		
Temperature Drift	100% full load			±0.03	%/°C
Input Filter		C Filter			
Switching Frequency	Full load, nominal input		100		KHz
MTBF	MIL-HDBK-217F@25℃	1000			K hours
Isolation Resistance	Test at 500VDC	1000			MΩ
Isolation Capacitance			300		pF
Weight			3.5		g

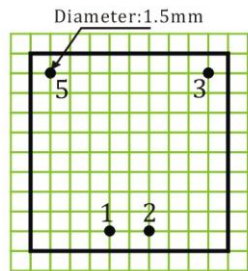
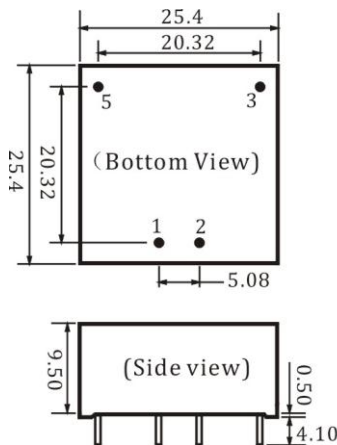
KYBD-5W Series



Environmental Specifications

Item	Test Conditions	Min.	Typ.	Max.	Unit
Storage Humidity	Non condensing			95	%
Temp. rise at full load			25	45	°C
Operating Temperature		-40		85	
Storage Temperature	Power derating (above 85°C)	-55		125	
Soldering Temperature	1.5mm from case for 10 seconds			300	
Cooling		Free air convection			

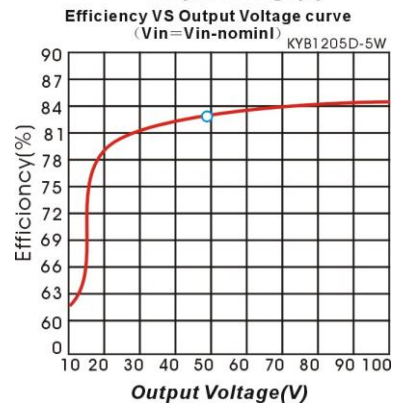
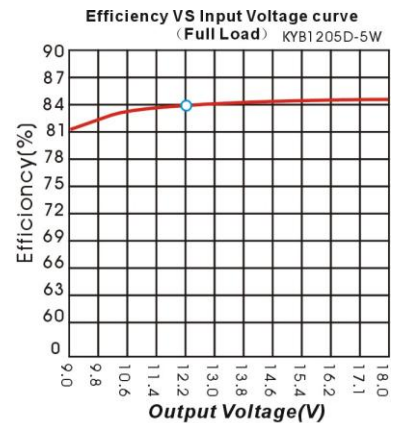
Mechanical Dimensions & Recommended Footprint



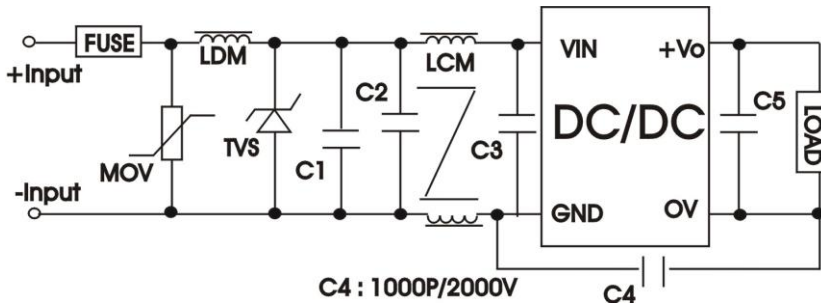
Note: Grid 2.54*2.54mm
Unit: mm
General tolerances: 0.20mm

Package	Vin	GND	OV	+Vo
KYBD	2	1	5	3

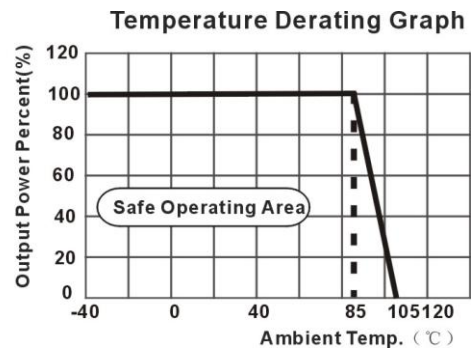
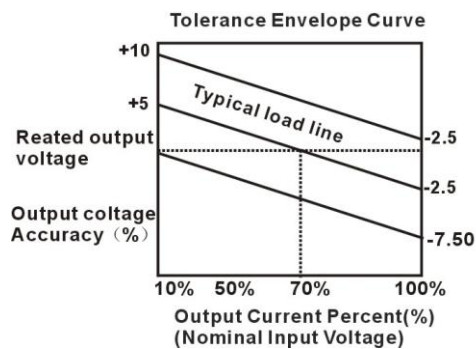
Product typical Curve



EMC Recommended Circuit



Tolerance Envelope Curve & Temperature Derating Graph



EMC Module Application Circuit

