TITLE	Number	Rev.	Page
KRS25F-xx series specifications	PRELIMINARY	0.1	1/5

Model number, Output ratings and Efficiency

MODEL No.	Output Voltage (VDC)	Output Current (A)		Efficiency at 100% Load (Typical)	
		100VAC	230VAC	100VAC	230VAC
KRS25F-03	3.3	6	6	69	69
KRS25F-05	5	5	5	74	74
KRS25F-12	12	2.1	2.1	80	80
KRS25F-15	15	1.7	1.7	80	80
KRS25F-24	24	1.1	1.1	80	80

Input specification

Input rating: 100 - 230VAC (85 ～ 264VAC)
50 - 60Hz (47 ～ 63Hz)
3.3V output : 0.47 - 0.26A typical (at nominal output)
Other outputs: 0.55 - 0.3A typical (at nominal output)

In-rush current: 17 / 41 A typical (at 100/230VAC input)

Leakage current: 0.5 / 0.75mA maximum (at 100/230VAC 63Hz input)

Output specifications

Voltage adjustment range: ±10%

Output voltage accuracy: ±5%

Input/Output regulation

MODEL No.	Input regulation (mVmax) (85-132/170-264VAC)	Load regulation (mVmax) (0～100% load)	Ripple and Noise (DC - 20MHz) (100% load)			
			100Vin		230Vin	
			*1	*2	*1	*2
KRS25F-03	16.5	100	200	250	150	150
KRS25F-05	25	100	200	250	150	150
KRS25F-12	60	100	250	250	100	100
KRS25F-15	75	100	350	350	100	100
KRS25F-24	120	100	400	450	100	150

*1:There is a capacitor on the output pin edge
*2:There is no capacitor on the output pin edge.

REV	DATE	COMMENT	DRW	CHK	APP
0.1	11-Jun-04	The part highlighted in red change			

KAGA COMPONENTS CO., LTD. Niigata factory	DEVISION	Drawn	Checked	Approved
	Engineering			
	DATE			
	14-May-04	komachi	koike	sugimoto

Tempertaure coeffecient	0.02%／℃ maximum
Drift	(0.5%＋15mV)maximum / 8H(after 1H warm-up)
Rise-up Time	300 mS maximum (at 100/230VAC input)
Hold-up Time	9 / 90 mS typical (at 100/230VAC input with nomial output)

Protection specifications

Over Voltage Protection	N/A
Over Current Protection	over 105%, Automatic recovery Avoid sustained operation in over load condition.
Thermal Shutdown	Power supply, and recycle on. The power supply will resume normal operation.

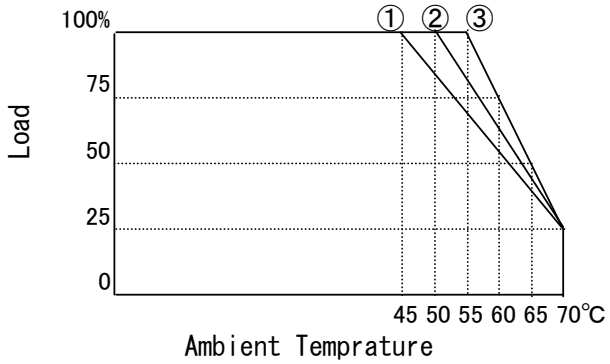
Isolation specifications

Isolation Resistance	Pri.-Sec	100MΩ MIN.	(500VDC)
	Pri.-Fg	100MΩ MIN.	(500VDC)
	Sec-Fg	100MΩ MIN.	(500VDC)
Isolation Voltage	Pri.-Sec	3000VAC / 1min	(10mA)
	Pri.-Fg	2000VAC / 1min	(10mA)
	Sec-Fg	500VAC / 1min	(10mA)

Environmental specifications

Operating Temp.	0 ～ +70 ℃ (see derating curve Fig.1)
Storage Temp.	-20 ～ +85℃
Humidity	20 ～ 85%RH (No condensing)

Fig.1 Derating curve (Load vs Ambient Temp.)



①:3.3V output only
(load reduction rate 3%/℃)
②:5V output only
(load reduction rate 3.75%/℃)
③:12V,15V and 24V output
(load reduction rate 5%/℃)

Note) 3.3V and 5V outputs are the input voltages of 100V or less and output current Dirating of 1%/V is necessary.

Application standard

Safety: UL60950
CSA C22.2 No.60950 (cUL)
CE (EN60950 A3 LVD)
CB (IEC60950:1999,US/6301/UL)

EMI: FCC Part 15 Class B meet
EN55022 Class B meet
VCCI(Ⅱ) meet

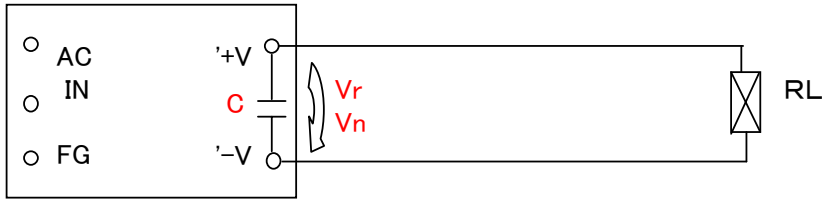
Shock & Vibration

Vibration: 10 ～ 55Hz 0.5mm width/1minute cycle
3 directions each 30 minutes

Shock: 20G (3 directions each 3 times)

CONDITION

(Single)



Vr : Measure point of line/load regulation and output voltage.

Vn : Measure point of ripple and noise. (Bayonet tip probe used)

C: 0.1μF film capacitor and 47μF electrolytic capacitor.

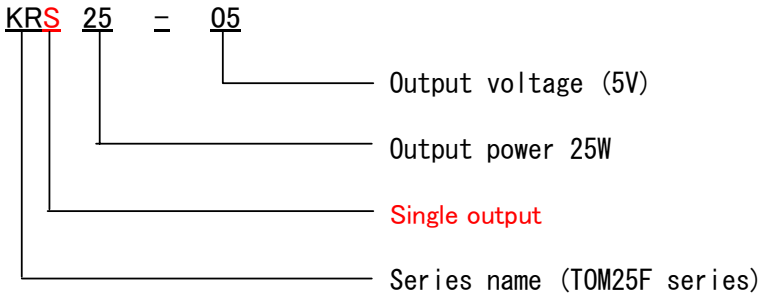
Externals size 41＊85＊27.4mm

Weight 100g (typ)

Switching Frequency 100KHz(typ)

TITLE	Number	Rev.	Page
KRS25F-xx series specifications	PRELIMINARY	0.1	4/5

Explanation of model name



Amends

After it delivers it, I will repair three years free of charge for an emergency breakdown. However, because handling is careless, it becomes for a fee.

Soldering condition

Dip: 240℃-255℃ (within five seconds)
Hand solder: 350℃±10℃ (within three seconds)

Others

This series is designed in our standard power supply for the general electronic equipment building in. Please do not use it for the equipment (medical equipment, aircraft, and nuclear power control system, etc.) by which the malfunction and the breakdown of the power supply threaten the human body and the life directly.

Directions

☆ The short-circuit leaving for a long time doesn't cause the breakdown and do not do, please.

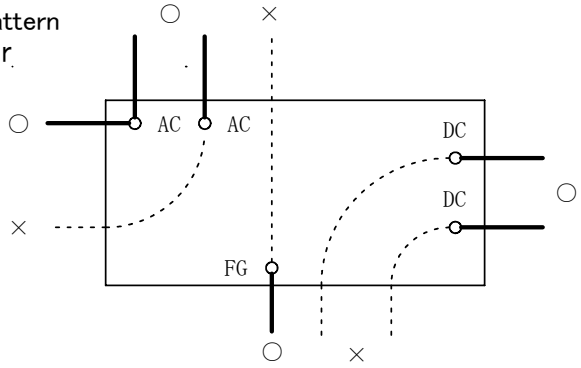
☆ Please note that there is a case to cause a defective start when a mass capacitor (about 10,000μF) is connected with the load edge.

☆ The input fuse prevents secondary destruction due to the breakdown of the power supply, and it doesn't operate normally in the exchange only of the fuse. Please request the repair to the agency or our company when the input fuse fuses.

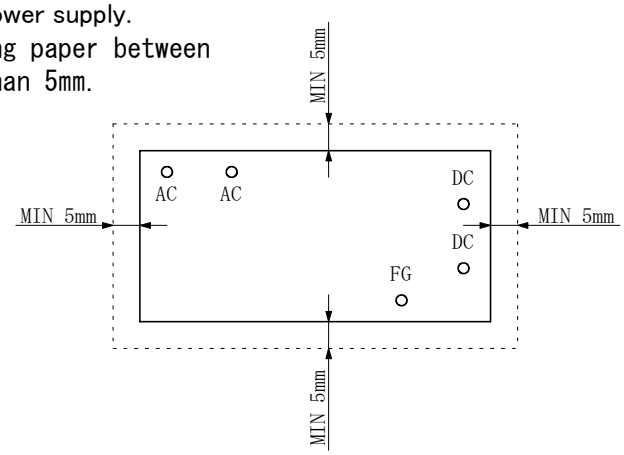
TITLE	Number	Rev.	Page
Application standard	PRELIMINARY	0.1	5/5

Directions

☆ Please arrange it to separate the pattern from this power supply so that the voltage of the noise terminal might become large if it arranges it so that the pattern of the AC input line may pass under this power-supply unit.
Moreover, please arrange it to separate the pattern from this power supply so that the output noise might become large if it arranges it so that the pattern ofthe DC output may pass under this power-supply unit.



☆ Please secure 5mm or more from the power supply when you arrange the pattern and parts (The chassis is included) that become different potential around the power supply.
Please insert the insulating paper between those when becoming less than 5mm.



☆ It is likely to make an internal connection disconnected when the stress more than the necessity is added to the I/O pin of the power supply.
Please adjust the stress to 2kgf or less by horizontal direction by 1kgf or lessin the vertical direction as shown in the figure below.