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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 $\pm 10\%$

Output voltage accuracy $\pm 5\%$

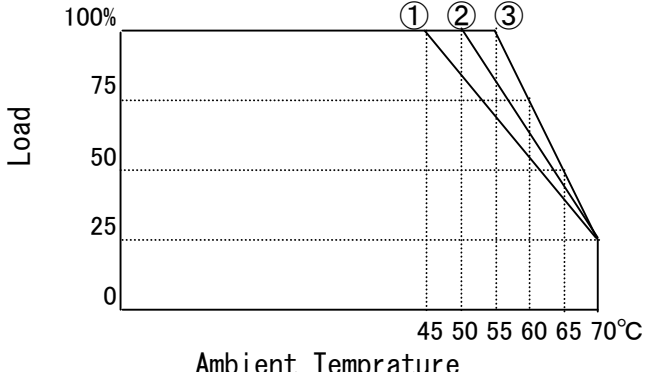
Input/Output regulation

MODEL No.	Input regulation (mVmax) (85-132/170-264VAC)	Load regulation (mVmax) (0~100% load)	Ripple and Noise (DC – 20MHz) (100% load)			
			100V _{in}		230V _{in}	
			*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.

0.1	11-Jun-04	The part highlighted in red change			
REV	DATE	COMMENT	DRW	CHK	APP
KAGA COMPONENTS CO., LTD. Niigata factory			Drawn	Checked	Approved
			Engineering		
			DATE		
			14-May-04	komachi	koike sugimoto

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Tempertaure coeffecient 0.02%/°C 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 <table border="0"> <tr> <td data-bbox="288 887 587 913">Isolation Resistance</td><td data-bbox="632 887 751 913">Pri.-Sec</td><td data-bbox="839 887 991 913">100MΩ MIN.</td><td data-bbox="1046 887 1161 913">(500VDC)</td></tr> <tr> <td></td><td data-bbox="632 920 735 947">Pri.-Fg</td><td data-bbox="839 920 991 947">100MΩ MIN.</td><td data-bbox="1046 920 1161 947">(500VDC)</td></tr> <tr> <td></td><td data-bbox="632 954 735 981">Sec-Fg</td><td data-bbox="839 954 991 981">100MΩ MIN.</td><td data-bbox="1046 954 1161 981">(500VDC)</td></tr> </table> <table border="0"> <tr> <td data-bbox="288 1025 539 1052">Isolation Voltage</td><td data-bbox="632 1025 751 1052">Pri.-Sec</td><td data-bbox="839 1025 1038 1052">3000VAC / 1min</td><td data-bbox="1110 1025 1198 1052">(10mA)</td></tr> <tr> <td></td><td data-bbox="632 1059 735 1086">Pri.-Fg</td><td data-bbox="839 1059 1038 1086">2000VAC / 1min</td><td data-bbox="1110 1059 1198 1086">(10mA)</td></tr> <tr> <td></td><td data-bbox="632 1093 735 1120">Sec-Fg</td><td data-bbox="839 1093 1023 1120">500VAC / 1min</td><td data-bbox="1110 1093 1198 1120">(10mA)</td></tr> </table>				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)
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Environmental specifications Operating Temp. 0 ~ +70 °C (see derating curve Fig.1) Storage Temp. -20 ~ +85°C Humidity 20 ~ 85%RH (No condensing)																											
Fig.1 Derating curve (Load vs Ambient Temp.)  ①: 3.3V output only (load reduction rate 3%/°C) ②: 5V output only (load reduction rate 3.75%/°C) ③: 12V,15V and 24V output (load reduction rate 5%/°C) Ambient Temperature Note) 3.3V and 5V outputs are the input voltages of 100V or less and output current Dirating of 1%/V is necessary.																											
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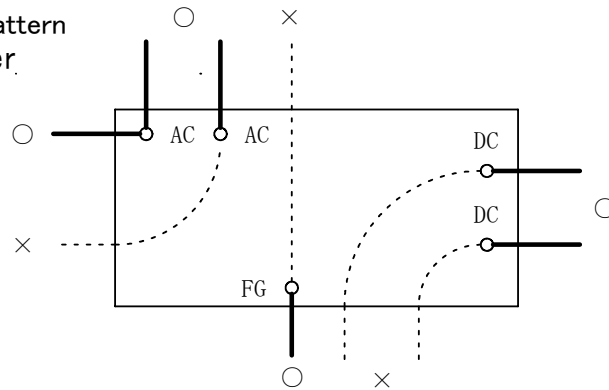
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KRS25F-xx series specifications	PRELIMINARY	0.1	3/5
Application standard Safety: UL60950 CSA C22.2 No.60950 (cUL) CE (EN60950 A3 LVD) CB (IEC60950:1999,US/6301/UL) EMI: FCC Part 15 Class B meet EN55022 Class B meet VCCI(Ⅱ) meet Shock & Vibration Vibration: 10 ~ 55Hz 0.5mm width/1minute cycle 3 directions each 30 minutes Shock: 20G (3 directions each 3 times) CONDITION (Single) The diagram shows a circuit with three input terminals: AC, IN, and FG. The IN terminal is connected to a capacitor labeled 'C'. The other side of the capacitor is connected to a load resistor labeled 'RL'. The output voltage across the load is labeled 'Vr' and the ripple voltage is labeled 'Vn'. 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)			
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KRS25F-xx series specifications	PRELIMINARY	0.1	4/5
Explanation of model name KRS 25 = 05 Output voltage (5V) Output power 25W Single output Series name (TOM25F series) 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°C-255°C (within five seconds) Hand solder: 350°C±10°C (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.			
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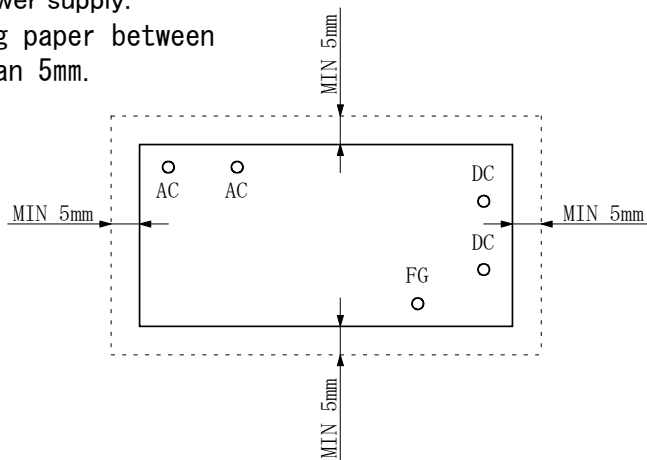
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Application standard	PRELIMINARY	0.1	5/5

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 of the 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 less in the vertical direction as shown in the figure below.

