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KLT30F SERIES SPECIFICATIONS	H00060N		

MODEL NUMBER, RATINGS

MODEL NUMBER	Input Ratings	Output Voltage and Current * 1					
		CH1		CH2		CH3	
		Voltage(V)	Current(A)	Voltage(V)	Current(A)	Voltage(V)	Current(A)
KLT30F-0522	100~230V 50~60Hz	+5	0~4	+12	0~1.2	-12	0~0.5
KLT30F-0533	100~230V 50~60Hz	+5	0~4	+15	0~1.0	-15	0~0.5

*1: Total output wattage not exceed 30W.

MAXIMUM RATINGS

ITEMS	CONDITIONS	MIN		MAX	UNIT
Input Voltage		85	—	264	Vac
Input Frequency		47	—	63	Hz
Output Power		0	—	30	W
Isolation Resistance	Pri. - Sec. DC 500V	—	100	—	$M\Omega$
	Pri. - Case DC 500V	—	100	—	
	Sec. - Case DC 500V	—	100	—	
Isolation Voltage	Pri. - Sec. 10mA	—	3000	—	Vac 1min.
	Pri. - Case 10mA	—	1500	—	
	Sec. - Case 20mA	—	500	—	
Operating temperature	*2	0	—	60	°C
Storage Temperature		-20	—	85	°C
Humidity	*3	20	—	85	%Rh

*2: See derating curve FIG.1.

*3: No condensing

Electrical Characteristics (Common Items) Ta=25°C, AC100/230V, 50/60Hz, TYP Output

ITEMS	CONDITIONS	MIN	TYP	MAX	UNIT
Input Regulation	Vin=85~132, 170~264	—	—	50	mV
Input Current	Vin=100V	—	0.8	—	A
	Vin=230V	—	0.4	—	A
In-rush Current	Vin=100V, 50Hz	—	15	—	A
	Vin=230V, 50Hz	—	30	—	A
Rise-up Time	Vin=100V	—	—	100	ms
	Vin=230V	—	—	100	ms
Hold-up Time	CH1	—	20	—	ms
	CH2, CH3	—	20	—	ms
Leakage Current	Vin=100V, 60Hz	—	—	0.5	$mArms$
	Vin=230V, 60Hz	—	—	0.75	$mArms$
OCP point		105	—	—	%
Drift	8H, after 1H	—	—	0.5%+15	mV
Tem. coefficient		—	—	0.02	$^{ \circ }C$

KAGA COMPONENTS CO., LTD. NIIGATA FACTORY	SECTION	Drawn	Check	Approved
	Engineer			
	DATE			
	02-Jul-03			

rev. 1		rev. 4	
rev. 2		rev. 5	
rev. 3		rev. 6	
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Electrical Characteristics (Model by)

KLT30F-0522

Ta=25°C, AC100/230V, 50/60Hz, TYP Output

ITEMS	CONDITION	MIN	TYP	MAX	UNIT
OVP point	CH1 only	5.75	—	—	V
Output Voltage		CH1	—	5.0	5.25
		CH2	11.4	12.0	12.6
		CH3	11.4	12.0	12.6
Output Current	*4 *5	CH1	—	3	A
		CH2	—	0.8	A
		CH3	—	0.45	A
Load Regulation		CH1	—	100	mV
		CH2	—	120	mV
		CH3	—	120	mV
Ripple	BW=DC~100MHz	CH1	—	100	mV
		CH2	—	100	mV
		CH3	—	100	mV
Ripple and Noise	BW=DC~100MHz	CH1	—	150	mV
		CH2	—	150	mV
		CH3	—	150	mV
Efficiency	Vin=100V	—	70	—	%
	Vin=230V	—	70	—	%

KLT30F-0533

Ta=25°C, AC100/230V, 50/60Hz, TYP Output

ITEMS	CONDITION	MIN	TYP	MAX	UNIT
OVP point	CH1 only	5.75	—	—	V
Output Voltage		CH1	—	5.0	5.25
		CH2	14.25	15.0	15.75
		CH3	14.25	15.0	15.75
Output Current	*4 *5	CH1	—	3	A
		CH2	—	0.65	A
		CH3	—	0.35	A
Load Regulation		CH1	—	100	mV
		CH2	—	120	mV
		CH3	—	120	mV
Ripple	BW=DC~100MHz	CH1	—	100	mV
		CH2	—	100	mV
		CH3	—	100	mV
Ripple and Noise	BW=DC~100MHz	CH1	—	150	mV
		CH2	—	150	mV
		CH3	—	150	mV
Efficiency	Vin=100V	—	70	—	%
	Vin=230V	—	70	—	%

*4 : Total output wattage do not exceed 30W

*5 : Using less than 10% of rated output, it is possible that regulation and ripple noise

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Vibration and Shock Vibration 10~55Hz 0.5mm 3direction each 30min.
Shock 20G (3direction each 3 times)

Additional function Over Current Protection Automatic Recovery
Over Voltage Protection CH1 only Zener limiter
Voltage adjust CH1

Safety UL60950
CSA22.2 No.60950
CE (LVD)

EMI FCC Part15 EN55022 VCCI (B) meet

Warranty 3 years

Cautions

- ★ Avoid sustained dead short condition
- ★ CH1 separated CH2, CH3
- ★ Units may not rise-up over 10,000uF capacitor add output.
- ★ Do not exceed total output power 30W.

Model designation

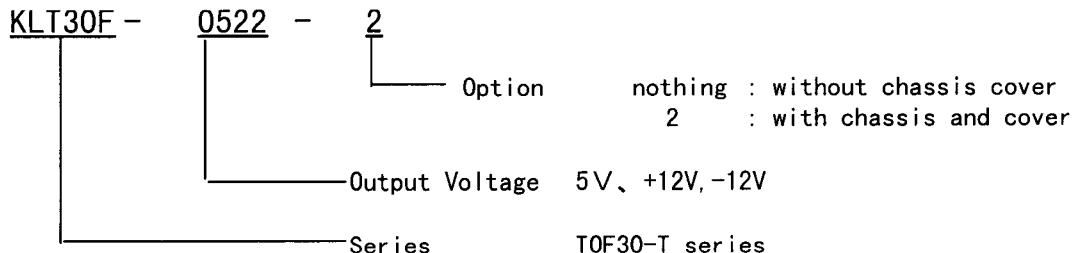
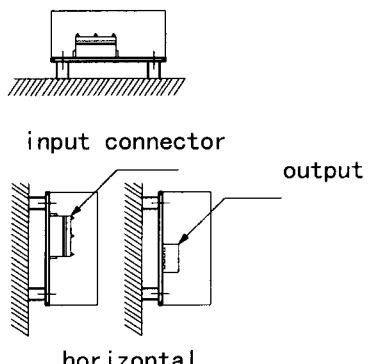
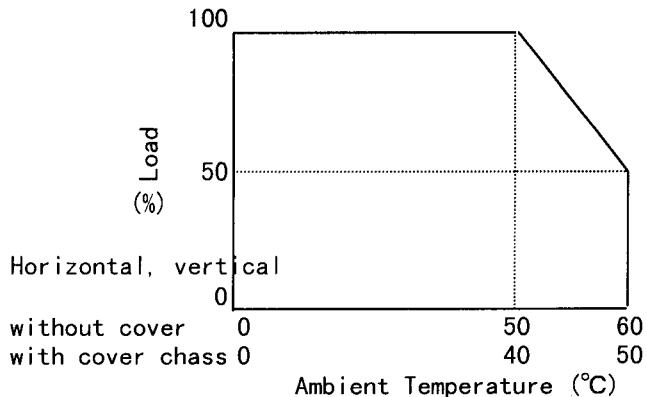
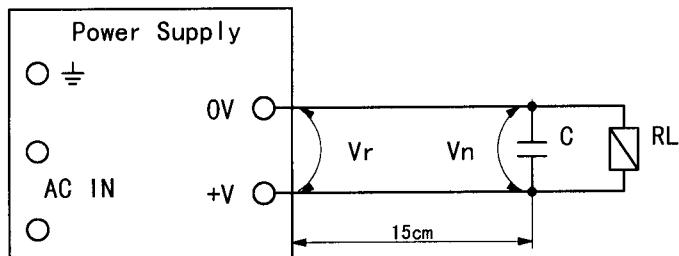


FIG. 1 Derating Curve (Load vs ambient Temperature) vertical



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Measurement Circuit



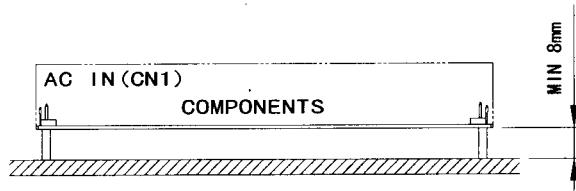
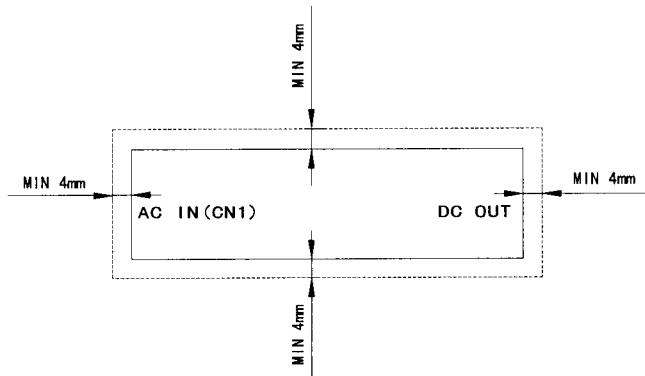
Vr: Output voltage, line and load regulation

Vn: Ripple and Noise (with Bayonet probe)

C: 0.1uF film capacitor and 47 uF electrolytic capacitor)

Caution

- * Do not use in overcurrent condition or short mode.
- * There are differ ground line from CH1 to CH2, CH3.
- * Using too large of capacitor ($10,000\mu F$) on your load may prevent the power supply from providing the rated output voltage.
- * Do not use output wattage of CH1, Ch2, CH3 more than rated wattage
- * When installing the components or laying out the pattern around the unit, maintain below. If this distance can not be kept, insert an insulation sheet between them



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Mounting

Use M3 screw for fix this unit.

■ parts is permitted to use metal chassis and screw.

