

JK20 Series



Features :

- 2:1 & 4:1, 9V ~ 75V Input Range
- High Efficiency
- Remote On /Off Control
- Short Circuit Protection
- Over Voltage Protection
- Industry Standard Package and Pinout
- 2 Years Warranty



Model List

Model Number*	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency @Max.Load % (Typ.)
JK20-12S3V3	9~18	3.3	4000	80
JK20-12S05V		5	4000	82
JK20-12S12V		12	1600	85
JK20-12S15V		15	1300	85
JK20-12D05V		±5	±2000	82
JK20-12D12V		±12	±830	84
JK20-12D15V		±15	±660	84
JK20-24S3V3	18~36	3.3	4000	82
JK20-24S05V		5	4000	83
JK20-24S12V		12	1600	85
JK20-24S15V		15	1300	85
JK20-24D05V		±5	±2000	83
JK20-24D12V		±12	±830	85
JK20-24D15V		±15	±660	85
JK20-48S3V3	36~75	3.3	4000	79
JK20-48S05V		5	4000	83
JK20-48S12V		12	1600	85
JK20-48S15V		15	1300	85
JK20-48D05V		±5	±2000	83
JK20-48D12V		±12	±830	84
JK20-48D15V		±15	±660	84
JK20-412S3V3	9~36	3.3	4000	78
JK20-412S05V		5	4000	82
JK20-412S12V		12	1600	85
JK20-412S15V		15	1300	85
JK20-412D05V		±5	±2000	82
JK20-412D12V		±12	±830	84
JK20-412D15V		±15	±660	84
JK20-424S3V3	18~75	3.3	4000	80
JK20-424S05V		5	4000	83
JK20-424S12V		12	1600	85
JK20-424S15V		15	1300	85
JK20-424D05V		±5	±2000	83
JK20-424D12V		±12	±830	85
JK20-424D15V		±15	±660	85

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Input Specifications

Input Filter		Pi Type
Surge Voltage (100 ms max.)	12Vin Models:	25V max.
	24Vin Models:	50V max.
	48Vin Models:	100V max.

Output Specifications

Output Power		20W max.
Voltage Set Accuracy		±2%
Line Regulation (Low Line, High Line at Full Load)		±0.5%
Load Regulation (0% to 100% Full Load)	Single:	±0.5%
	Dual:	±2%
Ripple and Noise (20MHz Bandwidth)	3.3, 5VDC Models:	80mVpk-pk max.
	Others Models:	1%Voutpk-pk max.
Short Circuit Protection		Indefinite (Automatic Recovery)
Minimum Load		0%
Capacitive Load	3.3 Vout Models:	8100μF max.
	5 Vout Models:	4700μF max.
	12 Vout Models:	680μF max.
	15 Vout Models:	470μF max.
	±5 Vout Models:	2300μF max. (Each Output)
	±12 Vout Models:	340μF max. (Each Output)
	±15 Vout Models:	230μF max. (Each Output)

Environmental Specifications

Operating Temperature Range (Ambient)	-40°C to +75°C (with Derating)
Maximum Case Temperature	+100°C
Storage Temperature Range	-55°C to +115°C
Cooling	Free-air Convection
Temperature Coefficient	±0.05%/ °C max.
Humidity	95%

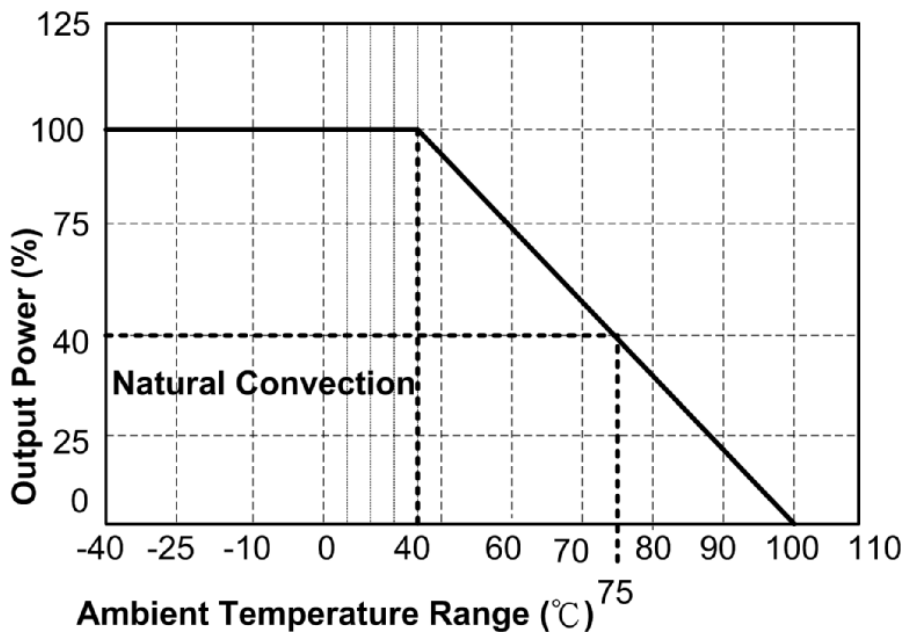
*Note: The ON/OFF control function is optional. The model without control function is marked with suffix-A(eg. JK20-24S05A) and the control pin will be omitted. If you do not want function, please inform us on your order.

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General Specifications

Input Voltage Variation, dv/dt		Max. 5V
Over Load Protection (% of Full Load at Nominal Vin)		>110% typ.
Overvoltage Protection (Single)		Zener Diode Clamp
MTBF(MIL-HDBK-217F, at +25°C, Ground Benign)		>5×10 ⁵ Hours
Isolation Voltage (60 sec.)	Input/Output:	1500VDC
Isolation Capacitance	Input/Output:	1800pF typ.
Isolation Resistance	Input/Output(500VDC):	>1000Mohm
Switching Frequency (Fixed)		250kHz typ. (Pulse Width Modulation PWM)
Remote On/Off	On:	TTL High or Open Circuit
	Off:	TTL Low or Short Circuit
Safety Standards		CE Class A, UL Compliance
Conducted Noise		EN55022 EN55024

Derating Graph

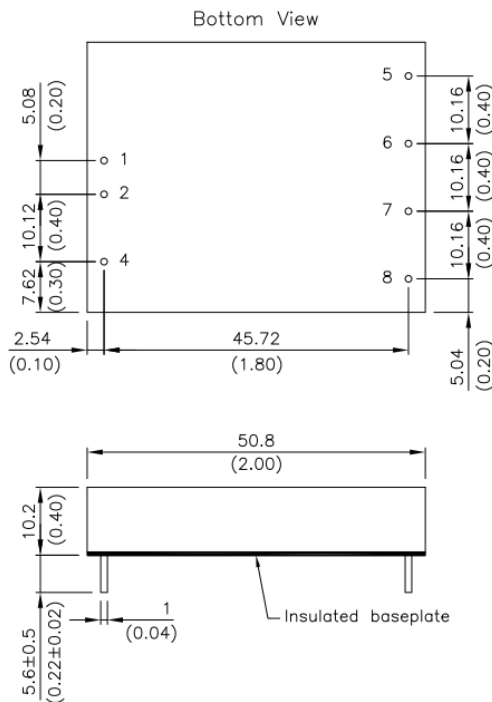


If you need more detailed information,
please contact us via email at sales@mail.longsun.tw

Physical Specifications

Case Material	Nickel-Coated Copper with Non-Conductive Base
Baseplate Material	Non-Conductive Base FR4
Potting	Flammability to UL94V-0
Dimensions	2.0"x1.6"x0.4"
Weight	50g(1.76oz)
Soldering Temperature	max. 260°C/10s
Environmental Compliance Certification	Reach RoHS

Outline Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
4	Remote On / Off Control	
5	No Pin	+Vout
6	+Vout	Common
7	-Vout	-Vout
8	Trim Control	

Dimensions in [mm], () = Inch

Notes

- All specifications are typical at $T_a=25^{\circ}\text{C}$, nominal input voltage, resistive load and rated output current unless otherwise noted.
- All specifications are subject to change without notice.
- Typical value is measured at nominal input voltage and no load.
- Maximum value is measured at nominal input voltage and full load.
- Typical value is measured at nominal input voltage and full load.

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