



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



10 Watts

- Regulated Single & Dual Output
- Wide 4:1 Input Range
- 1" x 1" Package
- 1500 VDC Isolation
- Operating Temperature -40 °C to +100 °C
- ITE Safety Approvals
- Remote On/Off
- Optional Heatsink
- Six Sided Metal Case
- 3 Year Warranty



Dimensions:

JWK10:

1.00 x 1.00 x 0.40" (25.4 x 25.4 x 10.16 mm)

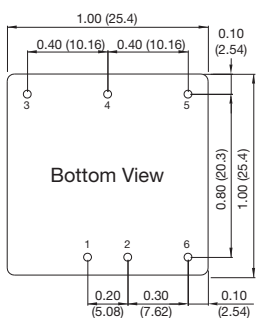
Models & Ratings

Input voltage	Output voltage	Output current		Input current ⁽³⁾		Maximum capacitive load ⁽²⁾	Efficiency	Model number
		Min	Max	No load	Full load			
9-36 V	3.3 V	330 mA	2.20 A	30 mA	350 mA	560 µF	86%	JWK1024S3V3
	5 V	300 mA	2.00 A		495 mA	560 µF	84%	JWK1024S05
	5.1 V	300 mA	2.00 A		505 mA	560 µF	84%	JWK1024S5V1
	12 V	125 mA	0.83 A		485 mA	150 µF	86%	JWK1024S12
	15 V	100 mA	0.66 A		475 mA	150 µF	87%	JWK1024S15
	24 V	62 mA	0.41 A		475 mA	68 µF	86%	JWK1024S24
	±5 V	±150 mA	±1.00 A		495 mA	±220 µF	84%	JWK1024D05
	±12V	±62 mA	±0.41 A		475 mA	±100 µF	86%	JWK1024D12
	±15V	±50 mA	±0.33 A		475 mA	±100 µF	87%	JWK1024D15
18-75 V	3.3 V	330 mA	2.20 A	20 mA	180 mA	560 µF	85%	JWK1048S3V3
	5 V	300 mA	2.00 A		250 mA	560 µF	84%	JWK1048S05
	5.1 V	300 mA	2.00 A		255 mA	560 µF	84%	JWK1048S5V1
	12 V	125 mA	0.83 A		240 mA	150 µF	86%	JWK1048S12
	15 V	100 mA	0.66 A		235 mA	150 µF	87%	JWK1048S15
	24 V	62 mA	0.41 A		240 mA	68 µF	86%	JWK1048S24
	±5 V	±150 mA	±1.00 A		250 mA	±220 µF	84%	JWK1048D05
	±12 V	±62 mA	±0.41 A		240 mA	±100 µF	86%	JWK1048D12
	±15 V	±50 mA	±0.33 A		235 mA	±100 µF	87%	JWK1048D15

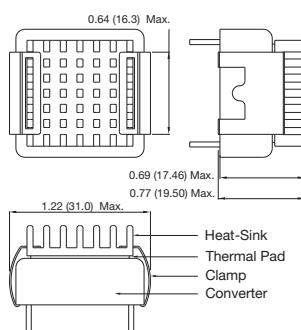
Notes

1. Input currents measured at nominal input voltage.
2. Input current is typically 10 mA at nominal input voltage when output is turned off using remote on/off.
3. Maximum capacitive load is per output.
4. Add suffix "-HK" for optional heatsink.

Mechanical Details



Optional Heatsink (-HK)



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	Common
5	-Vout	-Vout
6	Remote On/Off	Remote On/Off

Notes

1. All dimensions are in inches (mm)
2. Weight: 0.03 lbs (15.0g) approx.
3. Tolerance: X.XX±0.01 (X.X±0.25) X.XXX±0.005 (X.XX±0.13)
4. Pin Tolerance: ±0.002 (±0.05)

Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage Range	9.0		36	VDC	24 V nominal
	18.0		75	VDC	48 V nominal
Input Filter	Internal Pi type				
Input Surge			50	VDC for 1 s	24 V models
			100		48 V models
Undervoltage Lockout	ON at >8.5 V, OFF at <9 V				24 V models
	ON at >18 V, OFF at <17 V				48 V models
Remote On/Off	ON: Logic high (2.5-50 V) or open circuit OFF: Logic low (<1.0 V) or short pin 2 to pin 6				

Output

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage	3.3		30	VDC	See Models and Ratings table
Initial Set Accuracy			±2.0	%	At full load
Output Voltage Balance		±1.0	±2.0	%	For dual output with balanced loads
Minimum Load				A	No minimum load required
Line Regulation			±1.0	%	From minimum to maximum input at full load
Load Regulation			±0.5/±1.0	%	Single / Dual output, from 0 to full load
Cross Regulation			±5.0	%	On dual output models when one load is varied between 25% and 100% and other is fixed at 100%
Transient Response		3	6	% deviation	Recovery within 1% in less than 600 µs for a 25% load change.
Ripple & Noise		100		mV pk-pk	20 MHz bandwidth. Measured using 0.47 µF ceramic capacitor.
Overload Protection		150		%	
Short Circuit Protection					Continuous Trip & Restart (Hiccup mode), with auto recovery
Maximum Capacitive Load					See Models and Ratings table
Temperature Coefficient			0.02	%/°C	

General

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		86		%	See Models and Ratings table
Isolation: Input to Output	1500/1800			VDC	60 s/1 s
Isolation Resistance	10 ⁹			Ω	At 500 VDC
Isolation Capacitance			1500	pF	
Switching Frequency		450		kHz	
Power Density			50.8	W/in ³	
Mean Time Between Failure		350		kHrs	MIL-HDBK-217F, +25 °C GB
Weight		0.03 (15.0)		lb (g)	

Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating Temperature	-40		+100	°C	See Derating Curve.
Storage Temperature	-50		+125	°C	
Case Temperature			+100	°C	
Humidity			95	%RH	Non-condensing
Cooling					Natural convection

Safety Approvals

Safety Agency	Safety Standard	Notes & Conditions
CB	IEC60950-1	ITE
UL	UL/cUL60950-1	ITE

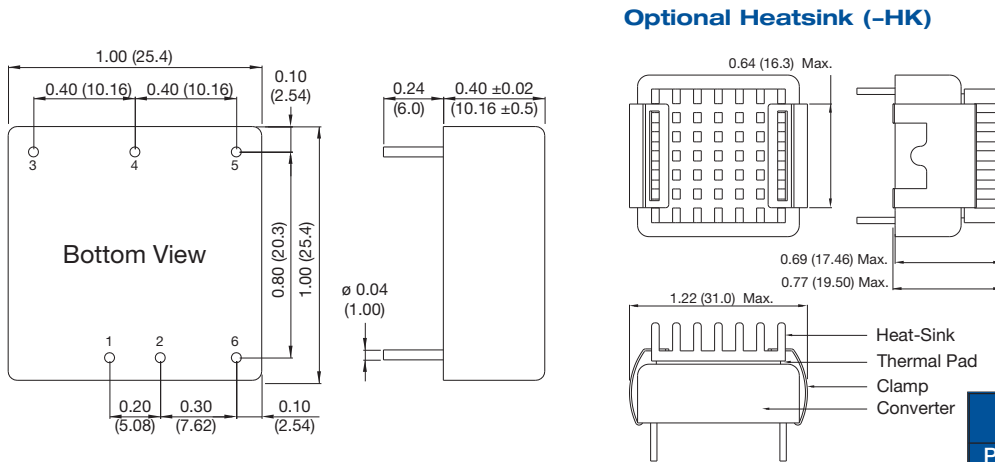
EMC: Emissions

Phenomenon	Standard	Test Level	Notes & Conditions
Conducted	EN55022	Class A	

EMC: Immunity

Phenomenon	Standard	Test Level	Criteria	Notes & Conditions
ESD	EN61000-4-2	±8 kV air discharge, ±6 kV contact	A	
Radiated	EN61000-4-3	10 V/m	A	
EFT/Burst	EN61000-4-4	±2 kV	A	With external capacitor, suggested part is CHEMI-CON KY 330µF/100V
Surge	EN61000-4-5	±1 kV	A	With external capacitor, suggested part is CHEMI-CON KY 330µF/100V
Conducted	EN61000-4-6	10 V rms	A	

Mechanical Details



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X.XXX±0.005 (X.XX±0.13)
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Application Notes

Derating Curve

