



JD SERIES SINGLE AND DUAL OUTPUT 4~8 WATTS ISOLATED DC/DC CONVERTERS

- ◆ 4.5V ~ 75V , 2:1 & 4:1 INPUT RANGE
- ◆ REGULATED OUTPUT
- ◆ 1500Vdc INPUT / OUTPUT ISOLATION
- ◆ HIGH EFFICIENCY (UP TO 83%)
- ◆ SHORT CIRCUIT PROTECTION (continuous)
- ◆ OVER VOLTAGE PROTECTION (clamp)
- ◆ 24PIN DIP WITH INDUSTRY STANDARD PACKAGE AND PINOUT



ELECTRICAL SPECIFICATIONS :
At Nominal Input , Full Load and 25°C

MODEL SELECTION CHART :

Model Number	Models (Input Voltage)	Output Voltage	Output Current	Efficiency	
	Vdc	Vdc	mA	@Max.Load %(Typ.)	
JD04-05S3V3	05 (4.5~9)	3.3	1200	70	
JD06-05S05V		5	1200	74	
JD06-05S12V		12	500	75	
JD06-05S15V		15	400	75	
JD06-05D05V		±5	±600	74	
JD06-05D12V		±12	±250	79	
JD06-05D15V		±15	±200	80	
JD04-12S3V3		12 (9~18)	3.3	1200	70
JD06-12S05V			5	1200	75
JD06-12S12V	12		500	81	
JD06-12S15V	15		400	87	
JD06-12D05V	±5		±600	75	
JD06-12D12V	±12		±250	80	
JD06-12D15V	±15		±200	80	
JD04-24S3V3	24 (18~36)		3.3	1200	73
JD06-24S05V			5	1200	78
JD06-24S12V		12	500	82	
JD06-24S15V		15	400	83	
JD06-24D05V		±5	±600	79	
JD06-24D12V		±12	±250	82	
JD06-24D15V		±15	±200	82	
JD04-48S3V3		48 (36~75)	3.3	1200	73
JD06-48S05V			5	1200	75
JD06-48S12V	12		500	82	
JD06-48S15V	15		400	83	
JD06-48D05V	±5		±600	77	
JD06-48D12V	±12		±250	82	
JD06-48D15V	±15		±200	83	
JD04-412S3V3	412 (9~36)		3.3	1200	70
JD06-412S05V			5	1200	73
JD06-412S12V		12	500	80	
JD06-412S15V		15	400	80	
JD06-412D05V		±5	±600	70	
JD06-412D12V		±12	±250	75	
JD06-412D15V		±15	±200	79	
JD04-424S3V3		424 (18~75)	3.3	1200	73
JD06-424S05V			5	1200	81
JD06-424S12V	12		500	81	
JD06-424S15V	15		400	81	
JD06-424D05V	±5		±600	77	
JD06-424D12V	±12		±250	80	
JD06-424D15V	±15		±200	80	

ABSOLUTE MAXIMUM INPUT VOLTAGE :

- 05 Models : 16V
- 12 Models : 25V
- 24 Models : 50V
- 48 Models : 100V
- 412 Models : 50V
- 424 Models : 100V

GENERAL SPECIFICATIONS :

- Switching Frequency : 300KHz Typical
- Efficiency : See Table
- Isolation Voltage :
Input-to-Output : 1500Vdc
Input/Output to Case : 1500Vdc
- Isolation Resistance : ≥ 1000Mohm(500VDC)

ENVIRONMENTAL SPECIFICATIONS :

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

PHYSICAL SPECIFICATIONS :

- Case Material : Nickel-Coated Copper with Non-Conductive Base
- Pin Material : Brass, Solder Coated
- Potting Material : Epoxy (Flammability to UL94V-0)
- Dimension : 1.25*0.8*0.43 inches
(31.8*20.3*11.0 mm)
- Weigh : 18g

INPUT SPECIFICATIONS :

- Input Voltage Range : See Table
- Input Filter : Pi Type

OUTPUT SPECIFICATIONS :

- Output Voltage & Current : See Table
- Output Voltage Accuracy : ±2 %
- Ripple & Noise(20MHz BW) :
5V, 3.3V : 80mVp-p max.
Others : 1% P-P max.
- Line Regulation : ±0.5 % max.
- Load Regulation F.L→1/4F.L :
Single Output : ±0.5 % max.
Dual Output : ±2.0 % max.
- Short Circuit Protection :
Continuous(auto-recovery)
- Over Load Protection : ≥ 110% of full Load
- Transient Response Recovery Time
(50% Load Step Change) : 300µs max.

RECOMMENDED INPUT FUSE(SLOW BLOW) :

- 05 Models : 4A/250V
- 12 Models : 2A/250V
- 24 Models : 1A/250V
- 48 Models : 0.5A/250V
- 412 Models : 1A/250V
- 424 Models : 0.5A/250V



JD SERIES

SINGLE AND DUAL OUTPUT
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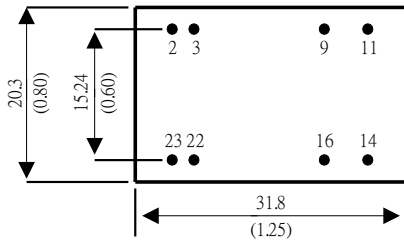
MODEL SELECTION CHART :

Model Number	Models (Input Voltage)	Output Voltage	Output Current	Efficiency
	Vdc	Vdc	mA	@Max.Load %(Typ.)
JD05-05S3V3	05 (4.5~9)	3.3	1600	70
JD08-05S05V		5	1600	74
JD08-05S12V		12	660	75
JD08-05S15V		15	530	75
JD08-05D05V		±5	±800	74
JD08-05D12V		±12	±330	79
JD08-05D15V		±15	±260	80
JD05-12S3V3	12 (9~18)	3.3	1600	70
JD08-12S05V		5	1600	75
JD08-12S12V		12	660	81
JD08-12S15V		15	530	81
JD08-12D05V		±5	±800	75
JD08-12D12V		±12	±330	80
JD08-12D15V		±15	±260	80
JD05-24S3V3	24 (18~36)	3.3	1600	73
JD08-24S05V		5	1600	78
JD08-24S12V		12	660	82
JD08-24S15V		15	530	83
JD08-24D05V		±5	±800	79
JD08-24D12V		±12	±330	82
JD08-24D15V		±15	±260	82
JD05-48S3V3	48 (36~75)	3.3	1600	73
JD08-48S05V		5	1600	75
JD08-48S12V		12	660	82
JD08-48S15V		15	530	83
JD08-48D05V		±5	±800	77
JD08-48D12V		±12	±330	82
JD08-48D15V		±15	±260	83
JD05-412S3V3	412 (9~36)	3.3	1600	70
JD08-412S05V		5	1600	73
JD08-412S12V		12	660	80
JD08-412S15V		15	530	80
JD08-412D05V		±5	±800	70
JD08-412D12V		±12	±330	75
JD08-412D15V		±15	±260	79
JD05-424S3V3	424 (18~75)	3.3	1600	73
JD08-424S05V		5	1600	81
JD08-424S12V		12	660	81
JD08-424S15V		15	530	81
JD08-424D05V		±5	±800	77
JD08-424D12V		±12	±330	80
JD08-424D15V		±15	±260	80

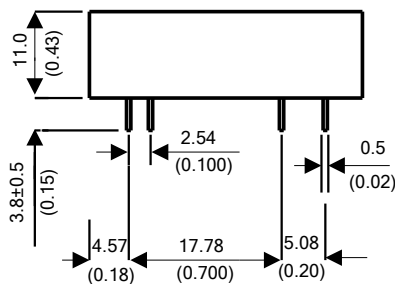
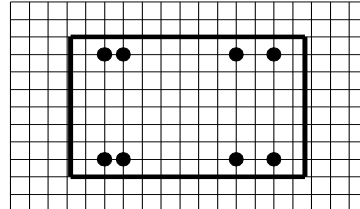
MECHANICAL SPECIFICATIONS

Mechanical Specifications

Bottom View



Recommended Pin Patterns
 Bottom View (2.54mm / 0.1inch grids)



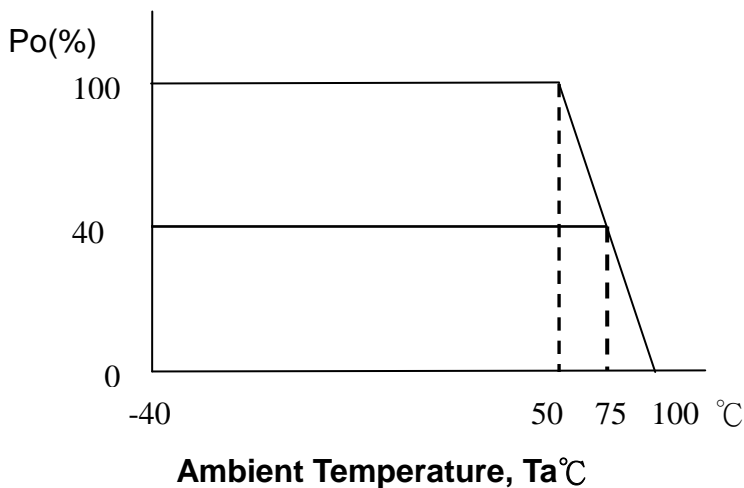
Pin Connections

Pin	Single	Dual
22 & 23	+Vin	+Vin
2 & 3	- Vin	- Vin
9	NC	Common
11	NC	- Vout
14	+Vout	+Vout
16	- Vout	Common

NC : No Connections

Tolerance	Millimeters	Inches
	X ±0.25	.XX ±0.01
	XX ±0.25	.XXX ±0.01
Pin	±0.05	±0.002

Power Derating Curve



NOTE:

- (1) All specifications are typical at $T_a=25^\circ\text{C}$, nominal input voltage, resistive load and rated output current unless otherwise noted.
- (2) Specifications subject to change without notice.