



JQ SERIES SINGLE AND DUAL OUTPUT

6~10 WATTS ISOLATED DC/DC CONVERTERS

- ◆ 9V ~ 75V , 2:1 & 4:1 INPUT RANGE
- ◆ REGULATED OUTPUT
- ◆ 1500Vdc INPUT / OUTPUT ISOLATION
- ◆ REMOTE ON / OFF CONTROL (optional)
- ◆ 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.)
JQ06-12S3V3	12 (9~18)	3.3	2000	83
JQ10-12S05V		5	2000	83
JQ10-12S12V		12	830	81
JQ10-12S15V		15	660	83
JQ10-12D05V		±5	±1000	73
JQ10-12D12V		±12	±410	75
JQ10-12D15V		±15	±330	75
JQ06-24S3V3	24 (18~36)	3.3	2000	83
JQ10-24S05V		5	2000	83
JQ10-24S12V		12	830	82
JQ10-24S15V		15	660	83
JQ10-24D05V		±5	±1000	75
JQ10-24D12V		±12	±410	77
JQ10-24D15V		±15	±330	77
JQ06-48S3V3	48 (36~75)	3.3	2000	83
JQ10-48S05V		5	2000	83
JQ10-48S12V		12	830	82
JQ10-48S15V		15	660	83
JQ10-48D05V		±5	±1000	75
JQ10-48D12V		±12	±410	77
JQ10-48D15V		±15	±330	77
JQ06-412S3V3	412 (9~36)	3.3	2000	80
JQ10-412S05V		5	2000	80
JQ10-412S12V		12	830	80
JQ10-412S15V		15	660	80
JQ10-412D05V		±5	±1000	75
JQ10-412D12V		±12	±410	75
JQ10-412D15V		±15	±330	75
JQ06-424S3V3	424 (18~75)	3.3	2000	80
JQ10-424S05V		5	2000	81
JQ10-424S12V		12	830	81
JQ10-424S15V		15	660	81
JQ10-424D05V		±5	±1000	75
JQ10-424D12V		±12	±410	75
JQ10-424D15V		±15	±330	75

ABSOLUTE MAXIMUM INPUT VOLTAGE :

- 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
- 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*0.5 inches
(31.8*20.3*12.7 mm)
- Weigh : 16g

INPUT SPECIFICATIONS :

- Input Voltage Range : See Table
- Input Filter : Pi Type
- Remote On/Off Control :
On : TTL High or Open
Off : TTL Low or Short

OUTPUT SPECIFICATIONS :

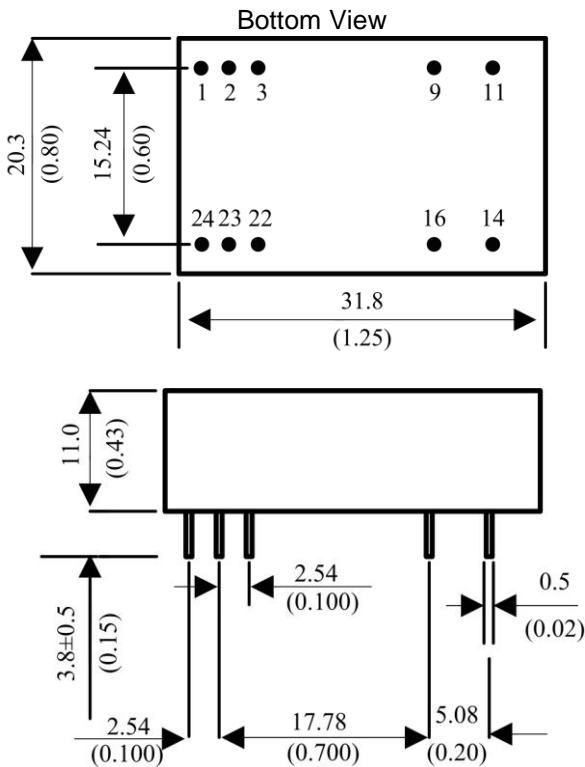
- Output Voltage & Current : See Table
- Output Voltage Accuracy : ±2 %
- Ripple & Noise (20MHz BW) :
5V, 3.3V : 80mVp-p max.
Others : 1% P-P max.
- Line Regulation : ±0.5 % max.
- Load Regulation F.L.→1/4F.L :
Single Output : ±0.5 % max.
Dual Output : ±2.0 % max.
- Short Circuit Protection :
Continuous(auto-recovery)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

RECOMMENDED INPUT FUSE(SLOW BLOW) :

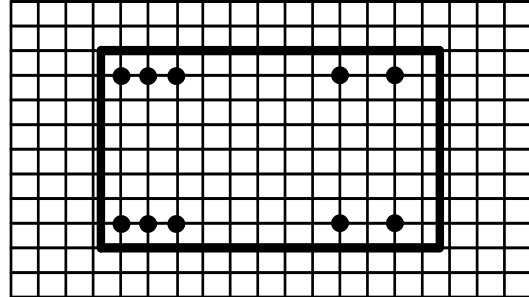
- 12 Models : 2A/250V
- 24 Models : 1A/250V
- 48 Models : 0.5A/250V
- 412 Models : 1A/250V
- 424 Models : 0.5A/250V

MECHANICAL SPECIFICATIONS

Mechanical Specifications



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



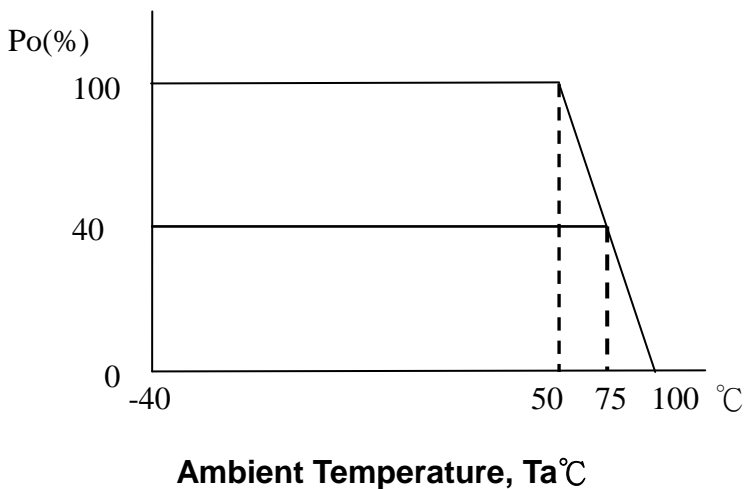
Pin Connections

Pin	Single	Dual
22 & 23	+Vin	+Vin
2 & 3	- Vin	- Vin
9	NC	Common
11	NC	- Vout
14	+Vout	+ Vout
16	- Vout	Common
24	NC	NC
1	Remote on/off control	

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.