

DC DC

Part Num

PKQ75 SERIES

50 - 75 WATT 1/4 BRICK DC-DC CONVERTERS



Features:

- 50-75W Isolated Output
- Quarter Brick Package
- Regulated Outputs
- Open Frame Design is Available
- Efficiency to 90%
- 1500VDC Isolation
- Continuous Short Circuit Protection

Electrical Characteristics:

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		%EFF.	SIZE
				NO LOAD	FULL LOAD		
PKQ75-24S18	18-36 VDC	1.8 VDC	0.5 - 25A	60 mA	2259 mA	83	Quarter-Brick
PKQ75-24S25	18-36 VDC	2.5 VDC	0.5 - 25A	60 mA	3064 mA	85	Quarter-Brick
PKQ75-24S33	18-36 VDC	3.3 VDC	0.5 - 20A	70 mA	3125 mA	88	Quarter-Brick
PKQ75-24S05	18-36 VDC	5 VDC	0.5 - 15A	80 mA	3472 mA	90	Quarter-Brick
PKQ75-48S18	36-75 VDC	1.8 VDC	0.5 - 25A	50 mA	1116 mA	84	Quarter-Brick
PKQ75-48S25	36-75 VDC	2.5 VDC	0.5 - 25A	50 mA	1514 mA	86	Quarter-Brick
PKQ75-48S33	36-75 VDC	3.3 VDC	0.5 - 20A	50 mA	1563 mA	88	Quarter-Brick
PKQ75-48S05	36-75 VDC	5 VDC	0.5 - 15A	80 mA	1736 mA	90	Quarter-Brick

NOTE: 1. Nominal Input Voltage 24 or 48 VDC

Specification

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V.....	18-36V
	48V.....	36-75V
Undervoltage lockout	24Vin power up.....	17V
	power down	15.5V
	48Vin power up	34V
	power down	32.5V
Positive Logic Remote ON/OFF _{3,4}		
Input Filter		PI Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy :		±1% max.
Transient Response :75% - 100% Step Load Change		
Error Band.....		±5% Vout
Recover Time.....		<500µs
External Trim Adj. Range		±10%
Ripple & Noise, 20MHz BW.....	40mV RMS., max	
	100mV pk-pk, max	
Temperature Coefficient.....		±0.03%/°C
Short Circuit Protection.....		Continuous
Line Regulation1		±0.2% max.
Load Regulation2		±0.2% max.
Over Voltage Protection trip Range, % Vo nom.....		115-140%
Current Limit		110% ~140% Nominal Output

GENERAL SPECIFICATIONS:

Efficiency.....		See Table
Isolation Voltage	Input/Output.....	1500VDC min.
	Input/Case.....	1500VDC min.
	Output/Case.....	1500VDC min.
Isolation Resistance		107 ohm min.
Switching Frequency		300KHz, Typ.
Operating Case Temperature		-40°C to 100°C
Storage Temperature		-40°C to +105°C
Thermal Shutdown, case Temp.		100°C Typ
Dimensions		1.45x2.28x0.50 inches (36.8x57.9x12.7 mm)
Case Material (Standard).....	Aluminum Baseplate with Plastic Case	
	(Suffix "O" Type).....	Open Frame
Weight.....		61.8g

EC7A Series Derating curve

PIN CONNECTION

Pin	Function
1	+V Input
2	ON/OFF
3	-V Input
4	-V Output
5	-Sense
6	Trim
7	+Sense
8	+Vout

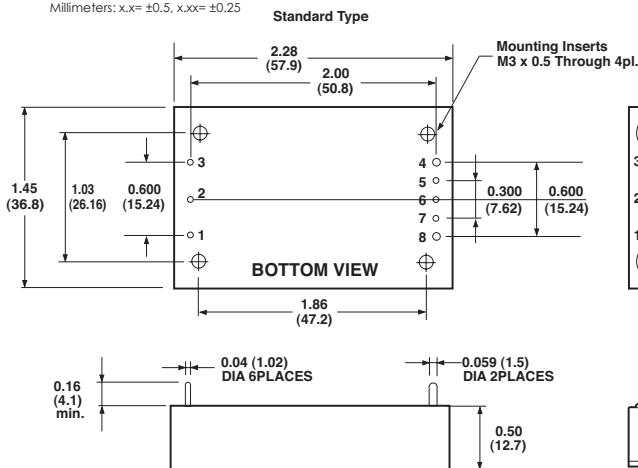
NOTE:

1. Measured From High Line to Low Line.
2. Measured From I_o min. to I_o max.
3. Logic Compatibility Open Collector ref, to -Input.
Module ONOpen Circuit
Module OFF..... <0.8Vdc
4. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF.
5. Suffix "O" to the Model Number with Open Frame Type.

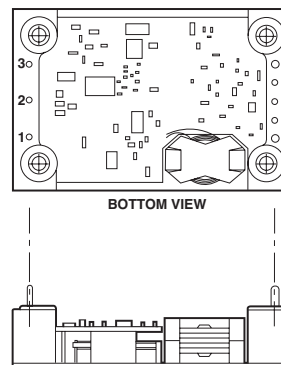
CASE A

All Dimensions In Inches(mm)

Tolerance Inches: x.xx= ±0.02, x.xxx= ±0.010
Millimeters: x.x= ±0.5, x.xx= ±0.25



Suffix "O" Type



All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted
Data sheets are subject to change without notice