

Datasheet

PKQ 75

Cincon

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PKQ75 SERIES

50 TO 75 WATT WIDE INPUT DC-DC CONVERTERS SINGLE OUTPUT

CAL®
US
E176177

FEATURES

- * 50 – 75W Isolated Output
- * Efficiency to 90%
- * 300KHz Switching Frequency
- * 2 : 1 Input Range
- * Regulated Outputs
- * Continuous Short Circuit Protection
- * Quarter-Brick Size Meet Industrial Standard
- * Open Frame Type Option
- * CE Mark Meets 2004/108/EC
- * UL60950-1 Approval



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	Capacitor Load max
			MIN.	MAX.	NO LOAD	FULL LOAD		
PKQ75-24S18	18-36 VDC	1.8 VDC	0.5A	25A	60 mA	2259 mA	83	25000uF
PKQ75-24S25	18-36 VDC	2.5 VDC	0.5A	25A	60 mA	3064 mA	85	25000uF
PKQ75-24S33	18-36 VDC	3.3 VDC	0.5A	20A	70 mA	3125 mA	88	20000uF
PKQ75-24S05	18-36 VDC	5 VDC	0.5A	15A	80 mA	3472 mA	90	15000uF
PKQ75-48S18	36-75 VDC	1.8 VDC	0.5A	25A	50 mA	1116 mA	84	25000uF
PKQ75-48S25	36-75 VDC	2.5 VDC	0.5A	25A	50 mA	1514 mA	86	25000uF
PKQ75-48S33	36-75 VDC	3.3 VDC	0.5A	20A	50 mA	1563 mA	88	20000uF
PKQ75-48S05	36-75 VDC	5 VDC	0.5A	15A	80 mA	1736 mA	90	15000uF

NOTE: 1. Nominal Input Voltage 24 or 48VDC

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS:

Input Voltage Range.....24V..... 18 - 36V
 48V 36 - 75V
 Input Surge Voltage (100ms max.) 24V 50Vdc max.
 48V 100Vdc max.
 Under voltage lockout 24Vin power up 17V
 power down 15.5V
 48Vin power up 34V
 power down 32.5V
 Positive Logic Remote ON/OFF (note 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..... <500us
 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 Regulation(note1) ±0.2% max.
 Load Regulation(note2) ±0.2% max.
 Over Voltage Protection trip Range ,% Vo nom. 115-140%
 Current Limit 110% ~140% Nominal Output
 Start up time 20ms Typ.

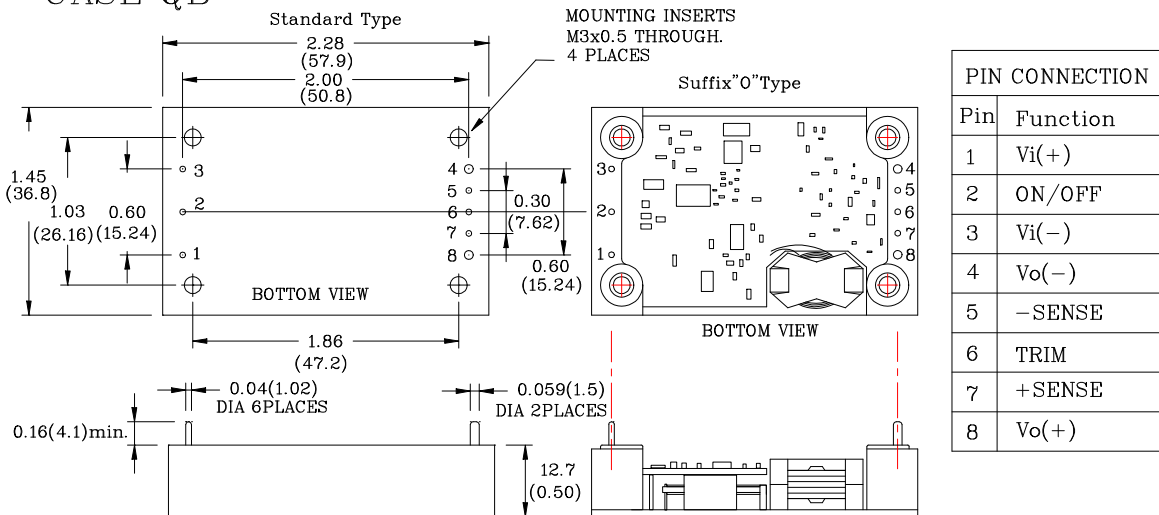
GENERAL SPECIFICATIONS:

Efficiency See Table
 Isolation Voltage Input/Output 1500VDC min.
 Input/Case 1500VDC min.
 Output/Case 1500VDC min.
 Isolation Resistance 10⁷ ohm min.
 Isolation Capacitance 1000pF Typ.
 Switching Frequency 300KHz ,Typ.
 Operating Case Temperature -40°C to +100°C
 Storage Temperature -40°C to +105°C
 Humidity 95% RH max. Non condensing
 MTBF MIL-HDBK-217F, GB, 25°C, Full Load 700 Khrs Typ.
 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 Standard: 61.8g, Open Frame: 39g

NOTE :

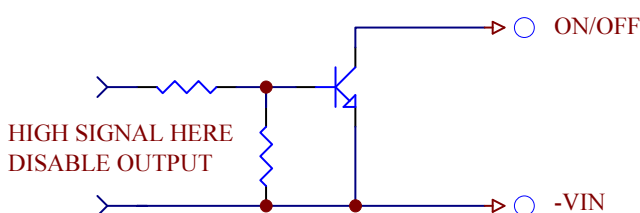
1. Measured From High Line to Low Line
2. Measured From Io min. to Io max.
3. Logic Compatibility Open Collector ref to -Input
 Module ON Open Circuit
 Module OFF < 0.8Vdc
4. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF
5. Suffix "O" to the Model Number with Open Frame Type.
6. Suffix "-C" to the Model Number with Clear Mounting Insert (3.2mm DIA.)

CASE QB

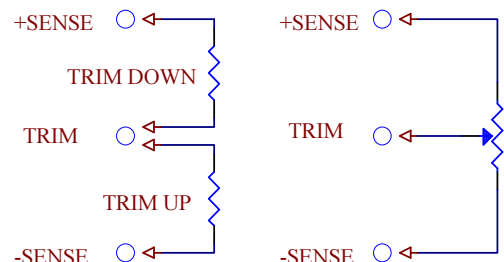


All Dimensions in Inches(mm)
 Tolerances: X.XX in.±0.02 in.(X.X mm ±0.5mm)
 X.XXX in.±0.010 in.(X.XX mm ±0.25 mm)

REMOTE ON/OFF CONTROL



EXTERNAL OUTPUT TRIM



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