



VQA75 Series 75 Watts

75W SINGLE OUTPUT
 2:1 INPUT ¼ BRICK
 ISOLATED & REGULATED
 SIX SIDE SHIELD
 HIGH EFFICIENCY
 HIGH DENSITY
 DIP PACKAGE STYLE
 RoHS

- 2:1 Input Range
 18~36VDC
 48~72VDC

- Efficiency up to 87%
- Operating Temperature:
 -40°C~+85°C
- 1500DC Isolation
- Over Voltage & Current Protection
- Short Circuit Protection
- Industry Standard Pin Configurations

Product Program

Part Number	Input Voltage (VDC)		Output Voltage (VDC)		Efficiency (% Typ)
	Nominal	Range	Voltage (VDC)	Current (A)	
VQA75-24S33	24	18~36	3.3	15.00	83
VQA75-24S05	24	18~36	5	15.00	86
VQA75-24S12	24	18~36	12	6.25	87
VQA75-24S15	24	18~36	15	5.00	87
VQA75-24S24	24	18~36	24	3.13	87
VQA75-24S28	24	18~36	28	2.68	86
VQA75-48S33	48	36~72	3.3	15.00	83
VQA75-48S05	48	36~72	5	15.00	86
VQA75-48S12	48	36~72	12	6.25	87
VQA75-48S15	48	36~72	15	5.00	87
VQA75-48S24	48	36~72	24	3.13	87
VQA75-48S28	48	36~72	28	2.68	86

ISOLATION SPECIFICATIONS

Item	Min	Units
Isolation voltage	1500	VDC
Isolation resistance	10 ⁹	Ω
Isolation capacitance	300	pF

COMMON SPECIFICATION

Efficiency	See product program table
Switching frequency	300KHz
Meet standard	IEC60950-1, UL60950-1, EN60950-1
Case material	Non-conductive plastic
Base material	Aluminum base plate
Potting material	Epoxy (UL94-V0)
Dimensions	57.9 X 36.8 X 13.5 mm (2.28 X 1.45 X 0.53 Inch)
Weight	60g (2.1oz)
MTBF	MIL – HDBK-217F2 5 x 10 ⁵ hrs

OUTPUT SPECIFICATION

Output power		75 Watts
Voltage accuracy	Full load and nominal Vin	± 1%
Voltage adjustability		10%
Line regulation	LL to HL at Full Load	± 0.2%
Load regulation	10% to 100% FL	± 0.5%
Cross regulation	Asymmetrical load 25% / 100% FL	± 5%
Ripple and noise	20MHz bandwidth	1%
Temperature coefficient		±0.02% / °C, max
Transient response recovery time	25% load step change	400uS
Over current protection		120%
Output Voltage Adjustment		10%
Over load protection	% of FL at nominal input	120%,max
Short circuit protection		Hiccup, automatics recovery

INPUT SPECIFICATION

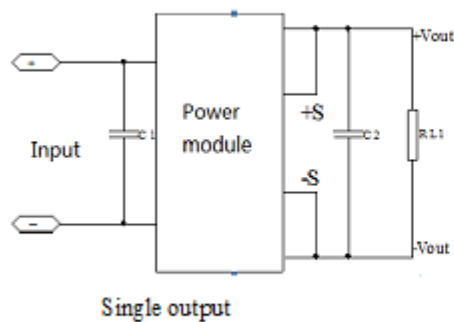
Input voltage range	2:1	24V 48V	18~36 VDC 36~75 VDC
Startup time	Nominal Vin and		20mS typ
Remote control	On Off		Open contact -Vin

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range	-40°C ~ +85°C (With derating)
Maximum case temperature	+105°C
Storage temperature range	-40°C ~ +105°C
Vibration	10~55Hz, 5G,
Relative humidity	5% ~ 90% RH

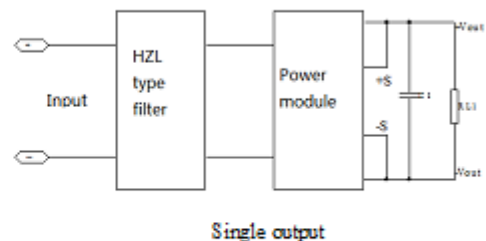
RECOMMENDED CIRCUIT

A. Basic Connection

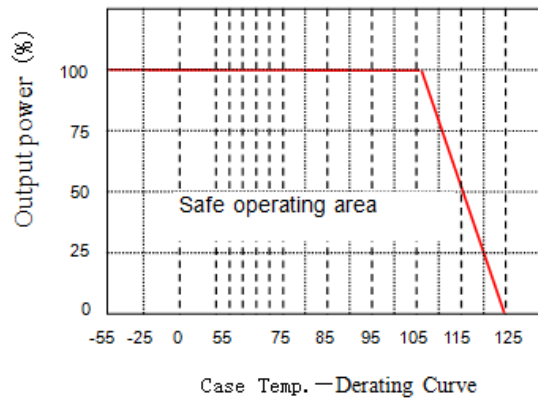
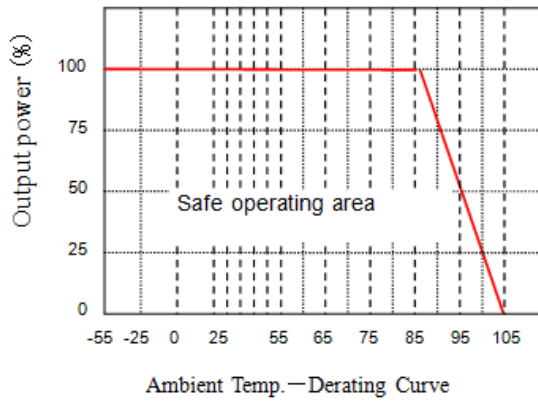


Note: C1, C2, C3 use high frequency ceramic capacitor

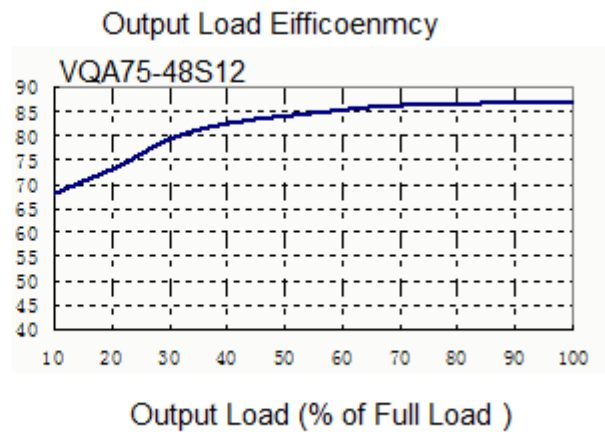
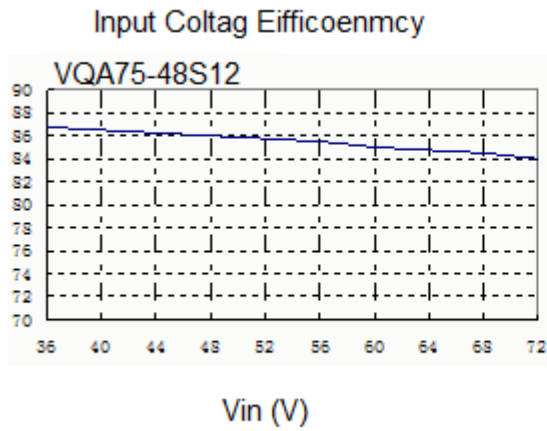
B. Connection with filter



TYPICAL CHARECTERISTICS



EFFICIENCY CURVE



FOOTPRINT DETAILS

PIN	1	2	3	4	5	6	7	8
SINGLE	-Vin	CTL	+Vin	-Vout	-S	Trim	+S	+Vout

OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT

