



VDA150 Series

150 Watts

150W SINGLE OUTPUT
2:1 HIGH VOLTAGE INPUT
ISOLATED & REGULATED
SIX SIDE SHIELD
HIGH EFFICIENCY
HIGH DENSITY
DIP PACKAGE STYLE

- 2:1 Input Nominal
 96VDC: 65~150VDC
 110VDC: 82~180VDC
 280VDC: 200~400VDC

- Efficiency up to 87%
- High Voltage Input
- Operating Temperature:
 -45°C~+85°C (*T)
- 500VDC & 1500VAC Isolation
- Over Voltage & Current Protection
- Remote ON/OFF Control
- Industry Standard Pin out
- RoHS

Product Program

Part Number	Input		Output		Efficiency (% Typ)
	Voltage (VDC)		Voltage (VDC)	Current (mA)	
	Nominal	Range			
VDA150-96S12	96	65~150	12	12500	83
VDA150-96S15	96	65~150	15	10000	83
VDA150-96S24	96	65~150	24	6250	87
VDA150-96S28	96	65~150	28	5360	87
VDA150-96S48	96	65~150	48	3120	86
VDA150-110S12	110	82~180	12	12500	83
VDA150-110S15	110	82~180	15	10000	83
VDA150-110S24	110	82~180	24	6250	87
VDA150-110S28	110	82~180	28	3120	87
VDA150-110S48	110	82~180	48	5350	86
VDA150-280S12	280	200~400	12	12500	84
VDA150-280S15	280	200~400	15	10000	85
VDA150-280S24	280	200~400	24	6250	87
VDA150-280S28	280	200~400	28	5350	87
VDA150-280S48	280	200~400	48	3120	86

ISOLATION SPECIFICATIONS

Item	Min	Units
Isolation voltage	500	VDC
	1500	VAC
Isolation resistance	10 ⁹	Ω
Isolation capacitance	300	pF

COMMON SPECIFICATION

Efficiency	See product program table	
Switching frequency	300KHz	
Approvals and standard	IEC60950-1, UL60950-1, EN60950-1	
Case material	Non-conductive plastic	
Base material	Aluminum base plate	
Potting material	Epoxy (UL94-V0)	
Dimensions	86 X 72X 14.7 mm (3.39 X 2.84 X 0.58Inch)	
Weight	95g (3.35oz)	
MTBF	MIL – HDBK-217F2	5 x 10 ⁵ hrs

OUTPUT SPECIFICATION

Output power	150 Watts	
Voltage accuracy	Full load and nominal Vin	± 1%
Voltage adjustability	10%	
Line regulation	LL to HL at Full Load	± 0.5%
Load regulation	10% to 100% FL	± 1%
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	

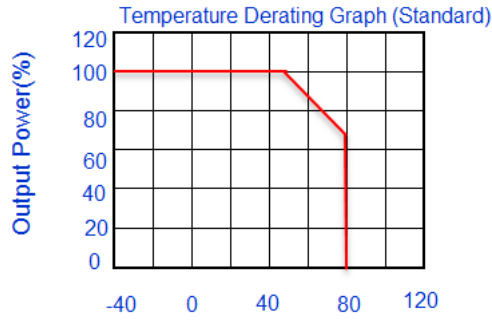
INPUT SPECIFICATION

Input voltage range	2:1	96V	65~150 VDC
		110V	82~180 VDC
		280V	200~400 VDC
Startup time	Nominal Vin and	Power up	20mS typ
Remote control ON/OFF	On	Contact -Vin	
	Off	No contact (Or 12V-40V)	

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range	Standard	-25°C ~ +55°C	
	T	-45°C ~ +85°C (with derating)	
Maximum case temperature	Standard	+85°C	
	T	+105°C	
Storage temperature range	Standard	-40°C ~ +105°C	
	T	-50°C ~ +105°C	
Vibration			10~55Hz, 5G,
Relative humidity			5% to 90% RH

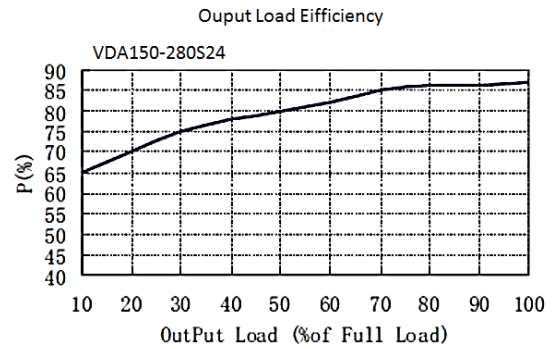
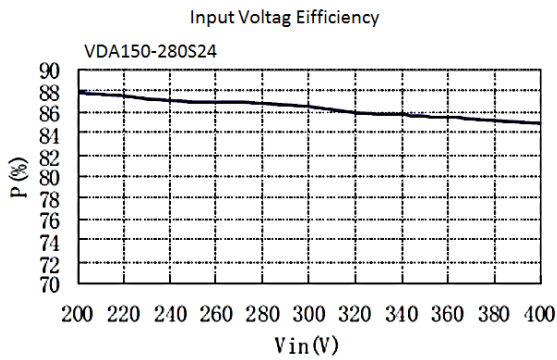
TYPICAL CHARECTERISTICS



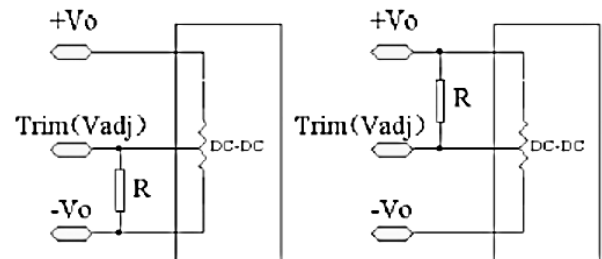
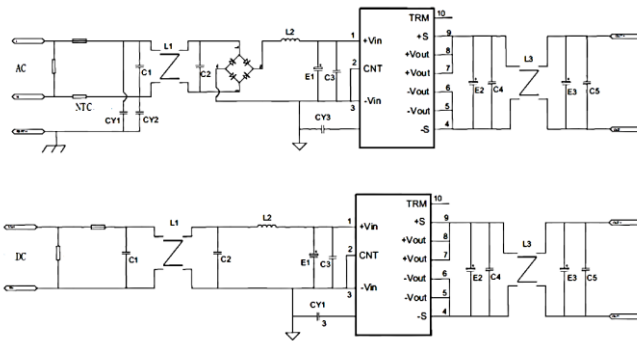
FOOTPRINT DETAILS

PIN	1	2	3	4	5	6	7	8	9	10
SINGLE	CTL	-Vin	+Vin	+S	+Vout	+Vout	-Vout	-Vout	-S	TRIM

EFFICIENCY AND OUTPUT



Recommended Circuit



OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT

