

YAS100-24-N

AC/DC Converter Specification

(Ver1.0)

Model Numbering

YAS100-24-N

Series: YA
 Output Mode: Single
 Output Power: 100W Series
 Output Voltage: 24Vdc
 Input Voltage Range: 165Vac ~ 265Vac



Introduction

Small volume;
 Delivers up to 96 watts;
 Trim Functions;
 1500V_{ac} isolation voltage;
 Short-Circuit, auto-recovery;
 Case Temperature: -25~+85
 2-years warranty.

Electrical Specification

Output	Min	Type	Max	Units	Notes
Power	-	96	-	W	-
Output Current	0	-	4	A	-
Output Voltage	23.76	24.00	24.24	Vdc	-
Output Voltage Trim Range	21.6	-	26.4	Vdc	Po≤100W, Io≤4A
Line Regulation	-	-	±0.2	%Vo	Input Voltage: 165Vac ~ 265Vac , Output Current: 4A
Load Regulation	-	-	±0.5	%Vo	Input Voltage: 220Vac, Output Current: 0.4A ~ 4A
Dynamic Response Recovery Time	-	-	400	μS	25% ~ 50% ~ 25% of Io 50% ~ 75% ~ 50% of Io di/dt=0.1A/μS
Dynamic Response Overshoot Rate	-	-	±5	%Vo	
Ripple and Noise	-	-	100	mV	Measured by 20MHz
Capacitive Load	0	-	1000	μF	Pure Resistive Load
Temperature Coefficient	-	-	±0.1	%/	-

Output	Min	Type	Max	Units	Notes
Short-Circuit Protection	Continuous, Automatic Recovery				

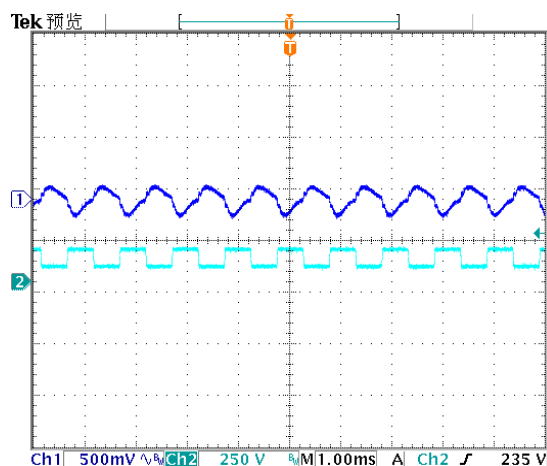
Input	Min	Type	Max	Units	Notes
AC Input Voltage Range	165	220	265	Vac	-
DC Input Voltage Range	200	310	375	Vdc	-
Input Voltage Frequency	45	-	65	Hz	-
Start-up Time	-	7	-	mS	Pure Resistive Load
Start-up Delay Time	-	280	-	mS	Pure Resistive Load

General	Min	Type	Max	Units	Notes
Isolation Voltage	-	-	1500	Vac	Input-Output Leak Current:5mA , Time:60S
	-	-	1500	Vac	Input-Case Leak Current:5mA , Time:60S
	-	-	500	Vac	Output-case Leak Current:5mA , Time:60S
Switching Frequency	-	130	-	KHz	-
Efficiency	86	88	-	%	Input Voltage:310Vdc
MTBF	-	3×10^5	-	h	Bellcore TR332, Tc=25
Pin Soldering Temperature	-	-	260		Wave soldering Time<10S
Manual Soldering Temperature	-	-	425		Manual Soldering Time<5S
Case Temperature	-25	-	85		Full Load
Storage Temperature	-40	-	105		-
Relative Humidity	10	-	90	%	No Condensing
Weight	-	520	-	Gram	-

Characteristic Curves at 25

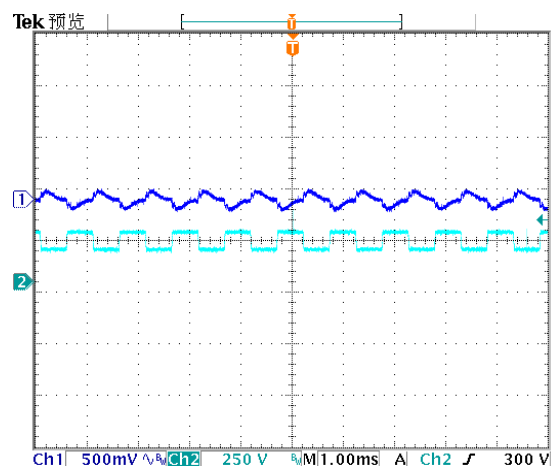
Typical Dynamic Response

Change From 25%~50%~25% $I_o(\max)$

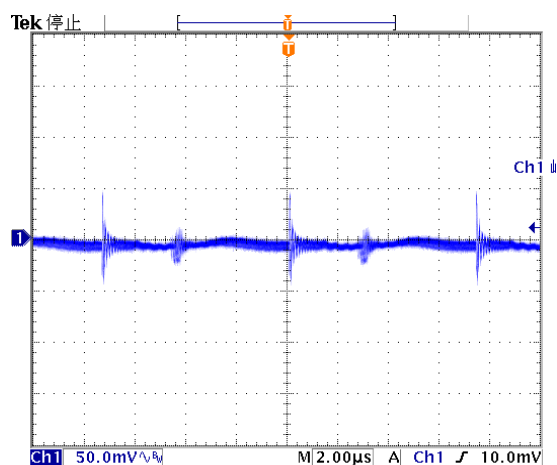


Typical Dynamic Response

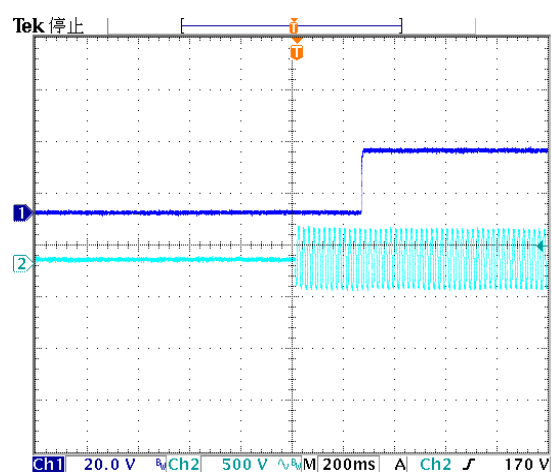
Change From 50%~75%~50% $I_o(\max)$



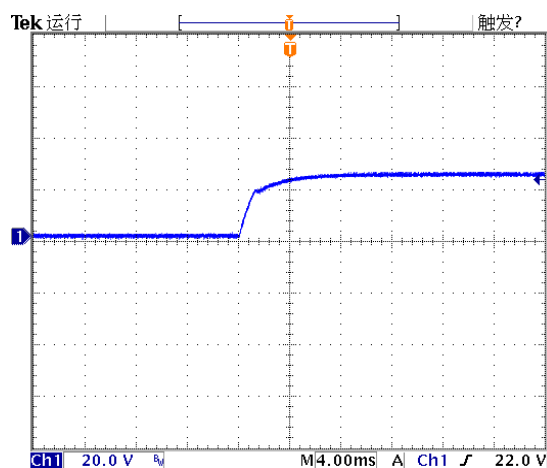
Typical Output Ripple Voltage



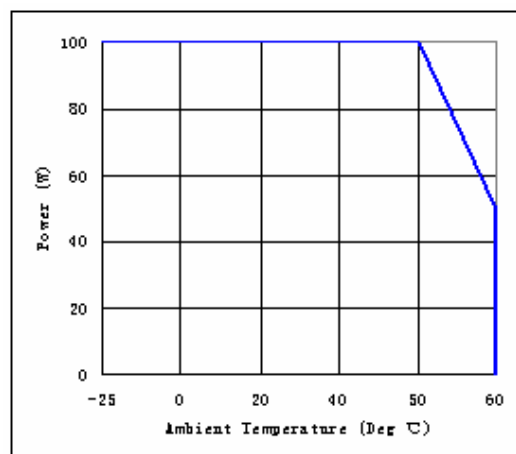
Typical Start-Up Delay



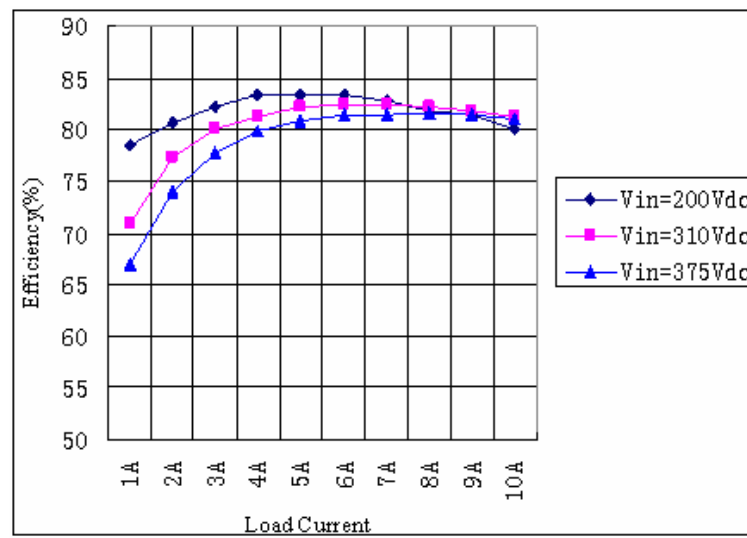
Typical Start-up



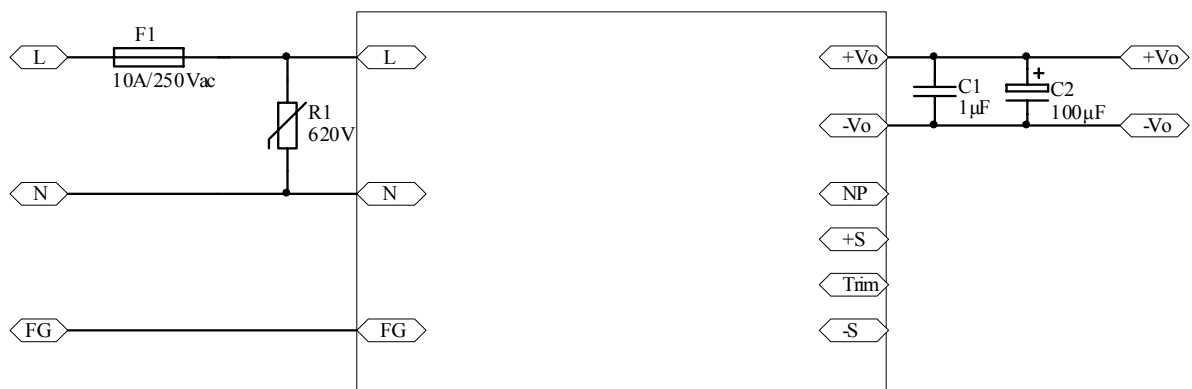
Derating Curve



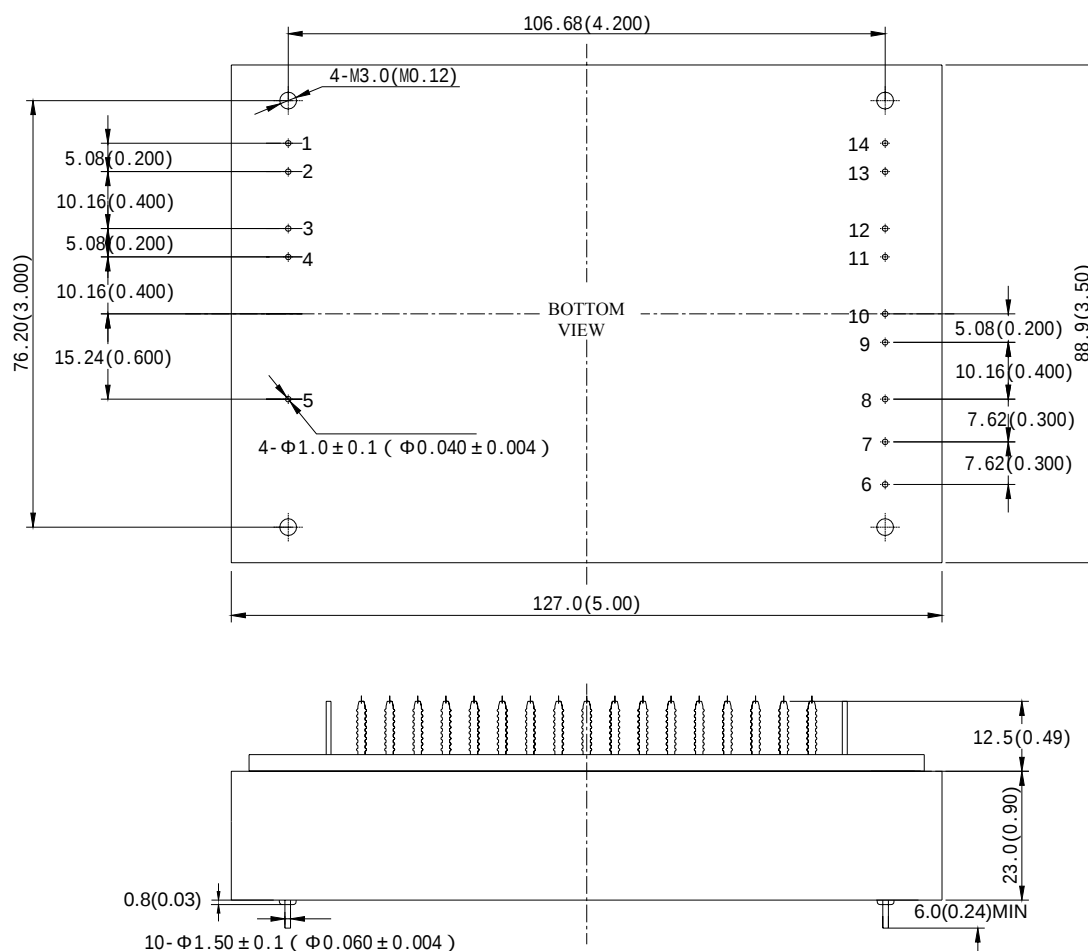
Typical Efficiency



Typical Application



Mechanical Diagram & Pins



Note: Units mm(inch)

Default tolerance : X.X $\pm$ 0.5mm(X.XX $\pm$ 0.02inch)

X.XX $\pm$ 0.25mm(X.XXX $\pm$ 0.010inch)

Pin	1、 2	3、 4	5	6	7	8	9、 10	11、 12	13、 14
Sign	L	N	FG	-S	TRIM	+S	NC	-Vo	+Vo