

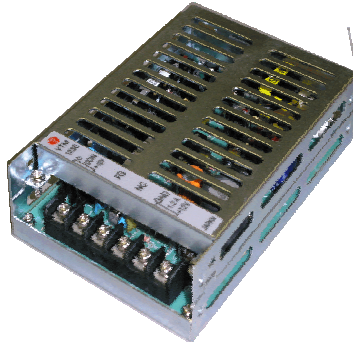


# ETA-USA

## HIGH QUALITY SWITCHING POWER SUPPLIES

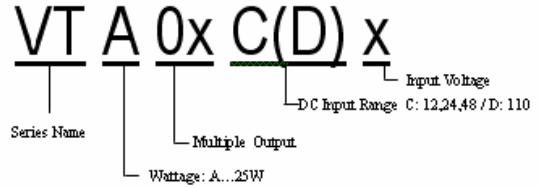
DC/DC SWITCHING POWER SUPPLY  
DC INPUT 12,24,48, 110  
MULTIPLE OUTPUT  
25WATTS

### VTA-00Cx/VTA-00D SERIES



Dimension: 85W x 135L x 31H

#### General Description



#### Features

1. Variety of Models
2. Chassis mount type
3. Compact and High Efficiency

#### DC INPUT: 12V

Input Characteristics	Unit	VTA01C12	VTA01C12B	VTA03C12	VTA04C12
Input Voltage	Vdc	DC 12V			
Input Voltage Range	Vdc	DC 9.2V-16V			
Inrush Current *1	A	Not Specified			
Efficiency (typical) *2	%	75	77	73	75
MTBF	H	520'000			
Switching Frequency	kHz	40 Fix	40 Fix	40 Fix	40 Fix

#### DC INPUT: 24V

Input Characteristics	Unit	VTA01C24	VTA01C24B	VTA03C24	VTA04C24
Input Voltage	Vdc	DC 24V			
Input Voltage Range	Vdc	DC 19-32V			
Inrush Current *1	A	Not Specified			
Efficiency (typical) *2	%	75			
MTBF	H	520'000			
Switching Frequency	kHz	40 Fix	40 Fix	40 Fix	40 Fix

#### DC INPUT: 48V

Input Characteristics	Unit	VTA01C48	VTA01C48B	VTA03C48	VTA04C48
Input Voltage	Vdc	DC 48V			
Input Voltage Range	Vdc	DC 38-63V			
Inrush Current *1	A	Not Specified			
Efficiency (typical) *2	%	72	77	74	75
MTBF	H	520'000			
Switching Frequency	kHz	37 Fix	37 Fix	37 Fix	37 Fix

#### DC INPUT: 110V

Input Characteristics	Unit	VTA01D	VTA01D-B	VTA03D	VTA04D
Input Voltage	Vdc	DC 110V			
Input Voltage Range	Vdc	DC 85-140V			
Inrush Current *1	A	20A (maximum)			
Efficiency (typical) *2	%	75	73	77	75
MTBF	H	500'000			
Switching Frequency	kHz	43 Fix.	43 Fix.	43 Fix.	43 Fix.





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### VTA-C / VTA-D

Output Characteristic	Unit	Models											
		VTA01Cx / D			VTA01Cx B / DB			VTA03Cx / 03D			VTA04Cx / WD		
Output Voltage	V	5	+12	-12	+12	+5	-12	+5	+12	-5	+5	+15	-15
Output Current 25W at horizontal mount	A	2.8	0.5	0.4	1.5	0.7	0.25	2.8	0.5	0.5	2.8 0.36 0.36 (Vin=24 -)		
30W at vertical mount without cover		3.0	0.75	0.5	1.7	0.8	0.3	3.0	0.75	0.75	3.0	0.5	0.5
Voltage Adjust Range	V	V1: +/-5%(maximum) of Rated Output Voltage at 25°C, rated input and no load V2, V3: fixed with tolerance +/-3.5% of Rated Output Voltage at 25°C, rated input and no load											
Ripple Noise(max)*3	mVpp	100	170	170	170	100	170	100	170	100	100	200	200
Rise up time	mS	200mS(maximum) at 25°C and rated input/output											
Hold up time	mS	Not specified (Vin=110 10mS(maximum) at 25°C and rated input/output)											
<b>Regulation</b>													
a. Line Regulation (max) (Vin=12,24,110)	mV	40	96	96	96	40	96	40	96	40	40	120	120
(Vin= 48)		35	84	84	84	35	84	35	84	35	35	105	105
b. Load Regulation (max)	mV	50	120	120	120	50	120	50	120	50	50	150	150
c. Temperature Coefficient*4	°C	0.03%/°C											
d. Drift(maximum) *5	mV	40	75	75	75	40	75	40	75	40	40	90	90
e. Dynamic Load Regulation (typ.) *6	mV	150	360	360	360	150	360	150	360	150	150	450	450
f. Recovery Time *6	mS	0.5mS(typical)											

\*1 at cold start

\*2 at rated input/output

\*3 measured by a bayonet probe at the output connector at a 0 to 100MHz bandwidth

\*4 at 0 to +50°C

\*5 for 7hour period after 1hour warm-up at 25°C and rated input/output

\*6 when output current changed between 25% and 75% of rated output current rapidly at rated input

Environmental Specification	
Operating Temperature	0 to +50°C
Operating Humidity	85%RH(non-condensing)
Storage Temperature	-20 to +85°C
Storage Humidity	-
Withstanding Voltage	Primary-Secondary AC1,500Vfor 1minute (Vin=110 2000) Primary-Frame Ground AC1,500V for 1minute (Vin=110 2000) Secondary-Frame Ground AC500V for 1minute
Isolation Resistance	Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation tester
Vibration	5-10Hz:10mm double amplitude,10-55Hz:19.6m/s2,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)
Shock	294m/s2
Cooling	Convection

Functions	
Over current Protection	Current Limiting with automatic recovery
Over voltage Protection	zener diode clamping
Remote Sense	not available
Remote On/Off	not available
Reverse Voltage Protection	by internal fuse (Vin=110 by internal bridge diode)
Line Conduction Noise	Not specified
Weight [g] (typical)	390 G
Dimension [mm]	85W × 135L × 31H



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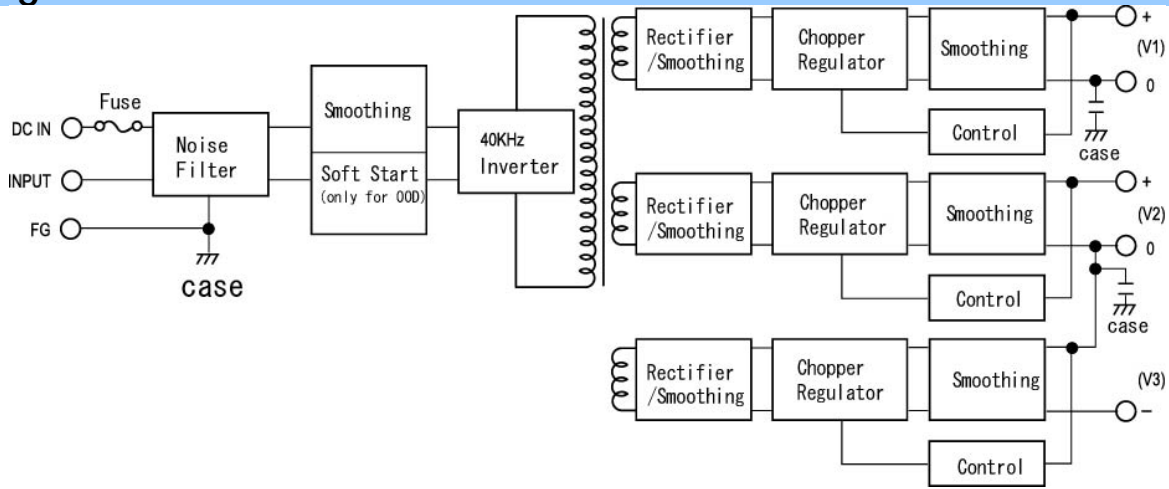
email at: [sales@eta-usa.com](mailto:sales@eta-usa.com)



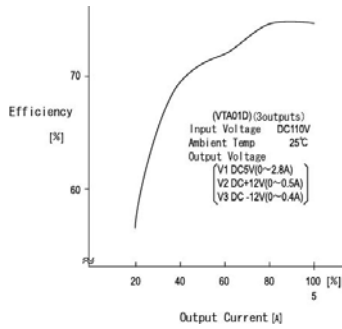
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### Block Diagram



### EFFICIENCY CURVE



### OCP CURVES

