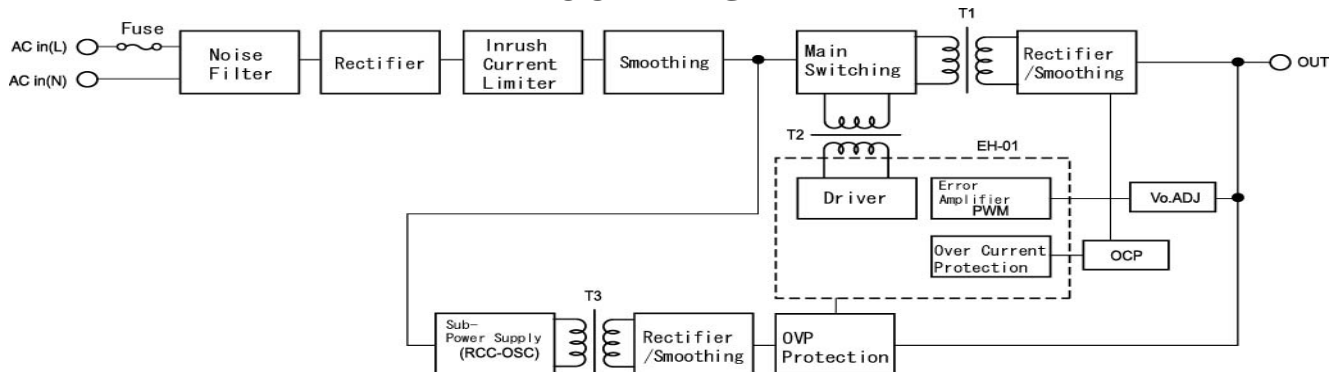


25 WATT AC-DC CONVERTER

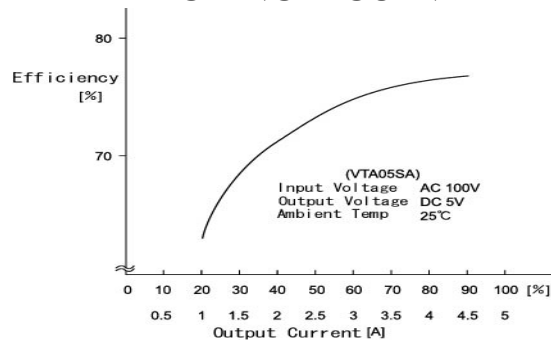
VTA-SA Series

Specifications<AC/DC>	Model				
VTA**SA 25WATTS/SINGLE OUTPUT	VTA05SA	VTA12SA	VTA15SA	VTA24SA	VTA48SA
Input Characteristic					
Input Voltage	AC100V(DC130V)				
Input Range	AC90-132V(DC110-175V)				
Input Frequency	50/60Hz				
Input Frequency Range	47 -440Hz				
Phase	Single				
Inrush Current *1	20A(maximum) at rated input/output				
Efficiency [%] (typical) *2	76	78	80	80	80

BLOCK DIAGRAM



EFFICIENCY CURVE



Specifications<AC/DC>	Model				
VTA**SA 25WATTS/SINGLE OUTPUT	VTA05SA	VTA12SA	VTA15SA	VTA24SA	VTA48SA
Output Characteristic					
Output Voltage [V]	5	12	15	24	48
Output Current [A]	5.0	2.1	1.7	1.1	0.5
Voltage Adjust Range	+/-10% of Rated Output Voltage(at no load within input range)				
Ripple and Noise [mVp-p](maximum) *3	100	170	200	290	530
Regulation					
a.Statistic Line Regulation [mV](maximum)	40	96	120	192	384
b.Statistic Load Regulation [mV](maximum)	45	108	135	216	432
c.Temperature Coefficient *4	0.03%/°C				
d.Drift[mV](maximum) *5	40	75	90	135	255
e.Dynamic Load Regulation [mV](typical) *6	150	360	450	720	1440
f.Recovery Time *6	0.5mS(typical)				
Rise up time	100mS(maximum) at 25°Cand rated input/output				300mS(maximum)
Hold up time	20mS(minimum) at 25°Cand rated input/output				
Functions					
Overcurrent Protection	Current Limiting with automatic recovery				
Overvoltage Protection	output shutdown				
Remote Sense	not available				
Remote On/Off	not available				
Environmental					
Operating Temperature	0 to +50°C				
Operating Humidity	85%RH(non-condensing)				
Storage Temperature	-20 to +85°C				
Storage Humidity	30 to 85%RH(non-condensing)				
Withstanding Voltage	Primary-Secondary AC1,500Vfor 1minute				
	Primary-Frame Ground AC1,500V for 1minute				
	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/s ² ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)				
Shock	294m/s ²				
Cooling	Convection				
Leakage Current	1.0mA(maximum)				
Line Conduction Noise	Not specified				
Safety	-				
Weight (typical)	350g				
MTBF [H]	790,000				
Switching Frequency[kHz](typical)	77				

Conditions:

*1 at cold start

*2 at DC130V and rated output

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

*4 at 0 to +50°C

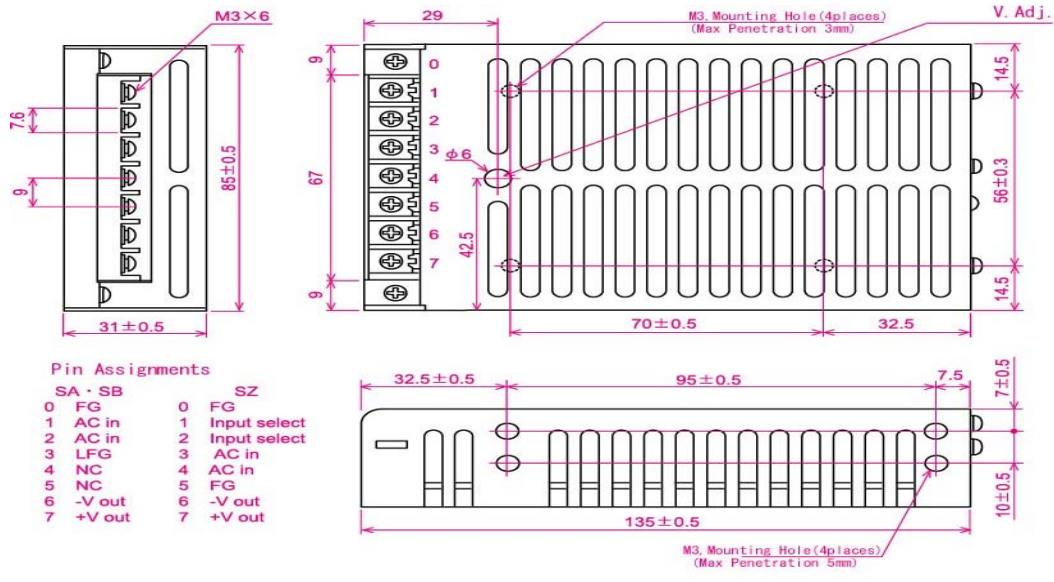
*5 for 7hour period after 1hour warm-up at 25°Cand rated input/output

*6 when output current changed from 25% to 75% of rated output current rapidly at AC100V input


ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

DIMENSION DIAGRAM



VTA_SA/SB