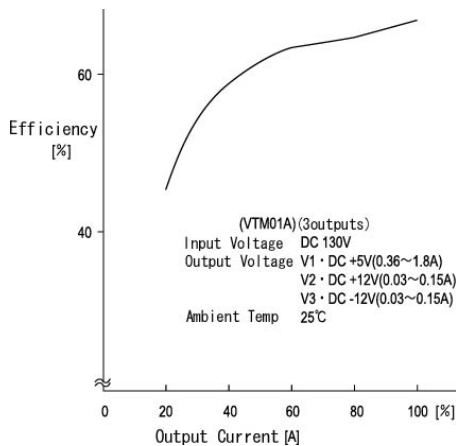


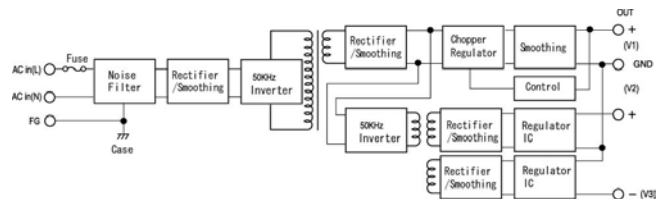
# 12.5 WATT AC-DC CONVERTER VTM-00A SERIES

Specifications<AC/DC>	Model		
VTM**A 12.5WATTS /3 OUTPUTS	VTM01A	VTM03A	VTM04A
<b>Input Characteristic</b>			
Input Voltage	AC100V		
Input Range	AC90-132V		
Input Frequency	50/60Hz		
Input Frequency Range	47 -440Hz		
Phase	Single		
Inrush Current *1	30A(maximum) at rated input/output		
Efficiency [%] (typical) *2	62		

### Efficiency Curve



### Block Diagram



<b>VTM**A Specification</b>									
Specifications<AC/DC>	Model								
VTM**A 12.5WATTS /3 OUTPUTS	VTM01A			VTM03A			VTM04A		
<b>Output Characteristic</b>									
Output Voltage [V]	+5	+12	-12	+5	+12	-5	+5	+15	-15
Output Current [A]	1.8	0.15	0.15	1.8	0.15	0.15	1.8	0.12	0.12
Voltage Adjust Range	V1: +/-3% of Rated Output Voltage(at no load within input range) V2,V3: +/-3.5% Rate Output Voltage(at no load within input range)								
Ripple and Noise [mVp-p](maximum) *3	100	25	25	100	25	25	100	25	25
<b>Regulation</b>									
a.Statistic Line Regulation [mV](maximum)	20	6	6	20	6	2.5	20	7.5	7.5
b.Statistic Load Regulation [mV](maximum)	40	60	60	40	60	25	40	75	75
c.Temperature Coefficient *4	0.02%/°C								
d.Drift[mV](maximum) *5	40	75	75	40	75	40	40	90	90
e.Dynamic Load Regulation [mV](typical) *6	Not specified								
f.Recovery Time *6	Not specified								
Rise up time	200mS(maximum) at 25°C and rated input/output								
Hold up time	10mS(minimum) at 25°C and rated input/output								
<b>Functions</b>									
Overcurrent Protection	only V1:Current Limiting with automatic recovery								
Overvoltage Protection	not available								
Remote Sense	not available								
Remote On/Off	not available								
<b>Environmental</b>									
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 <sup>2</sup> ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)								
Shock	294m/s <sup>2</sup>								
Cooling	Convection								
? Leakage Current	0.25mA(maximum)								
? Line Conduction Noise	Not specified								
? Safety	-								
? Weight (typical)	250g								
? MTBF [H]	690,000								
? Switching Frequency[kHz](typical)	42								

Conditions:

\*1 at cold start

\*2 at DC130V and rated output

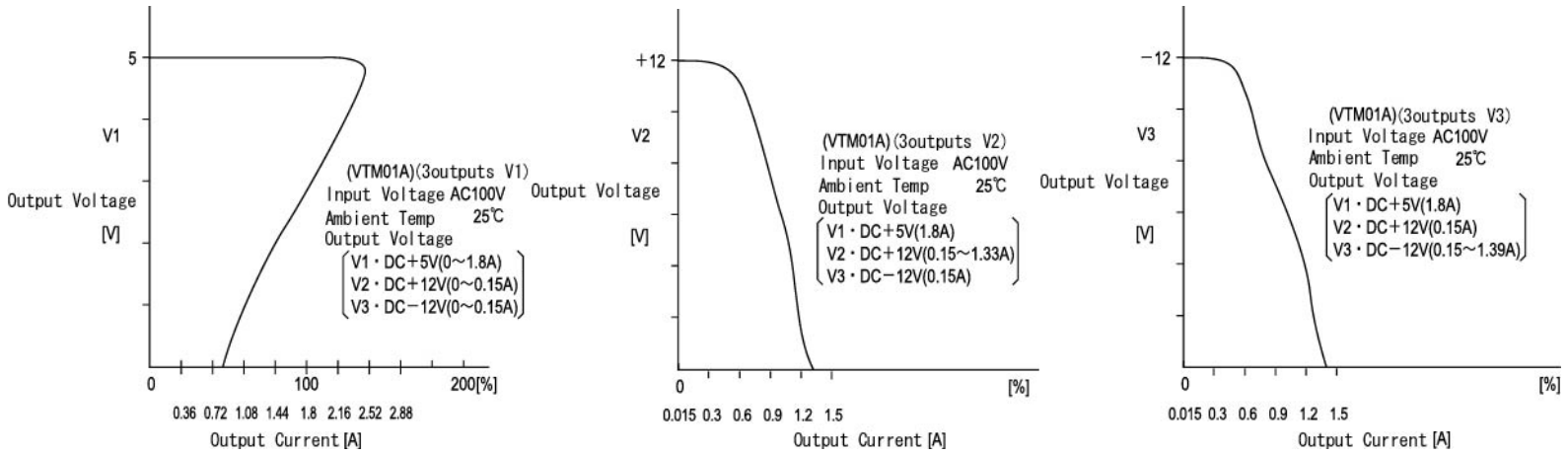
\*3 measured by a bayonet probe at the output connector at a 0 to 100MHz bandwidth

\*4 at 0 to +50°C

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

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

### OCP Curve



### Dimension Diagram (mm)

