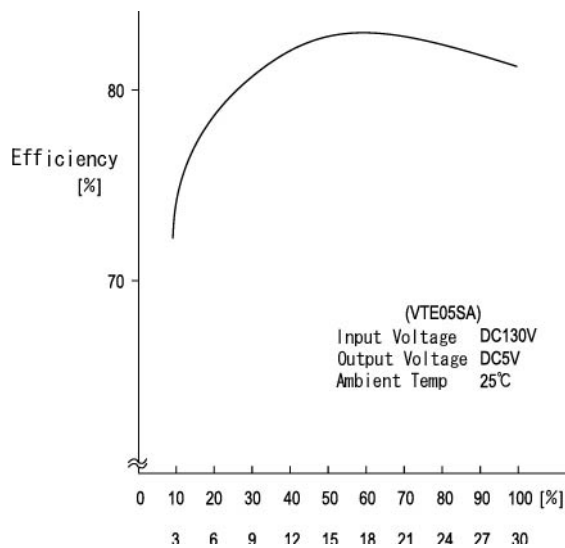


150 WATT AC-DC CONVERTER

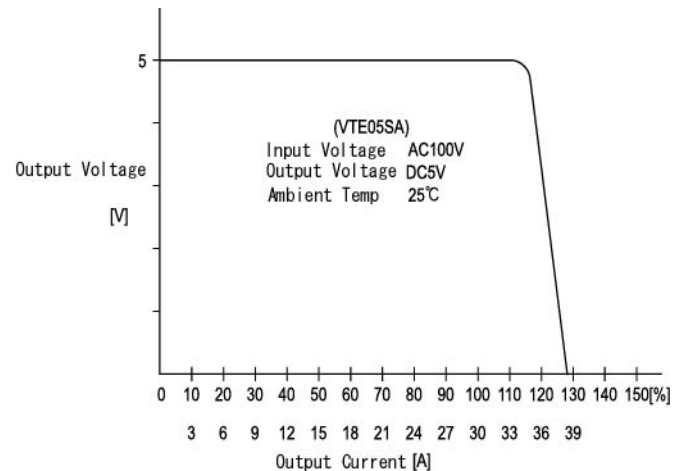
VTE-SA SERIES

Specifications<AC/DC>	Model					
VTE**SA	VTE02SA	VTE05SA	VTE12SA	VTE15SA	VTE24SA	VTE48SA
150WATTS/SINGLE OUTPUT						
Input Characteristic						
Input Voltage	AC100V(DC130V)					
Input Range	AC85-132V	AC90-132V(DC110-175V)				AC85-132V
Input Frequency	50/60Hz					
Input Frequency Range	47 -440Hz					
Phase	Single					
Inrush Current *1	20A(maximum) at rated input/output					
Efficiency [%] (typical) *2	66	81	83	85	86	87

Efficiency Curve



OCP Curve



VTE**SA Specification						
Specifications<AC/DC>	Model					
VTE**SA	VTE02SA	VTE05SA	VTE12SA	VTE15SA	VTE24SA	VTE48SA
150WATTS/SINGLE OUTPUT						
Output Characteristic						
Output Voltage [V]	2	5	12	15	24	48
Output Current [A]	30.0	30.0	14.0	11.0	7.0	4.2
Voltage Adjust Range	+/-10% of Rated Output Voltage(at no load within input range)					
Ripple and Noise [mVp-p](maximum) *3	100	100	170	200	290	530
Regulation						
a.Statistic Line Regulation [mV](maximum)	50	40	96	120	192	384
b.Statistic Load Regulation [mV](maximum)	100	45	108	135	216	432
c.Temperature Coefficient *4	0.03%/°C					
d.Drift[mV](maximum) *5	35	40	75	90	135	255
e.Dynamic Load Regulation [mV](typical) *6	400(maximum)	150	360	450	720	1440
f.Recovery Time *6	0.5mS(typical)					
Rise up time	300mS(maximum)	100mS(maximum) at 25°C and rated input/output				300mS(maximum)
Hold up time	20mS(minimum) at 25°C and 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)	1,400g					
? MTBF [H]	500,000					
? Switching Frequency[kHz](typical)	50					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°C and rated input/output

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



Block Diagram

