

50 WATT AC-DC CONVERTER ERB-SA SERIES

Specifications<AC/DC>	Model				
ERB**SA 50WATTS/SINGLE	ERB05SA	ERB12SA	ERB15SA	ERB24SA	ERB48SA
Input Characteristic					
Input Voltage	AC 100V(DC 130V)				
Input Range	AC 85-132V(DC 110-175V)				
Input Frequency	50/60Hz				
Input Frequency Range	47-440Hz				
Phase	Single				
Inrush Current *1	30A(maximum)at AC 100V				
Efficiency [%] (typical) *2	75	78	79	82	82
Output Characteristic					
Output Voltage [V]	5	12	15	24	48
Output Current [A]	10.0	4.2	3.4	2.1	1.0
Voltage Adjust Range	+/- 10% of Rated Output Voltage(at no load within the input range)				
Ripple and Noise [mVp-p](maximum) *3	100	170	200	290	530
Regulation					
a.Statistic Line Regulation [mV](maximum)	25	60	75	120	240
b.Statistic Load Regulation [mV](maximum)	50	120	150	240	480
c.Temperature Coefficient *4	0.03%/°C				
d.Drift[mV](maximum) *5	40	75	90	135	255
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	20mS(minimum) at 25°C and rated input/output				
Functions					
Overcurrent Protection	Current Limiting with automatic recovery				
Current[A]	11.5	4.83	3.91	2.42	1.15
Overvoltage Protection	output shutdown(to reset,leave 30seconds after shut-off)				
Voltage[V]	5.60	13.4	16.8	26.9	53.8
Remote Sense	not available				
Remote On/Off	not available				
Environmental					
Operating Temperature	5 to +50°C [enclosed type:-5 to 50°C at vertical mount/-5 to 40°C at horizontal mount]				
Operating Humidity	85% RH(non-condensing)				
Storage Temperature	-20 to +85°C				
Storage Humidity	85% RH(non-condensing)				
Withstanding Voltage	Primary-Secondary AC1,500V for 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	1mA(maximum) at 25°C ,rated input/output and rated input frequency				
? Line Conducted Noise	Built to meet FCC Part15-B Class B				
? Safety					
? Weight (typical)	370g/enclosed type:410g				
? MTBF [H]	560,000				
? Switching Frequency[kHz](typical) *7	25	30	30	35	35

Conditions:

*1 at cold start

*2 at DC 130V input and rated output

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

*4 at -5 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

*7 variable on input voltage and load conditions

