

ERS-SA SERIES

Specifications<AC/DC>	Model				
	ERS05SA	ERS12SA	ERS15SA	ERS24SA	ERS48SA
ERS**SA 10WATTS/SINGLE					
Input Characteristic					
Input Voltage	AC100V(DC130V)				
Input Range	AC85-132V(DC110-175V)				
Input Frequency	50/60Hz				
Input Frequency Range	47-440Hz				
Phase	Single				
Inrush Current *1	25A(maximum)at AC100V				
Efficiency [%] (typical) *2	72	76	78	79	81
Output Characteristic					
Output Voltage [V]	5	12	15	24	48
Output Current [A]	2.0	0.9	0.7	0.5	0.25
Voltage Adjust Range	+/- 5% 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	300mS(maximum) at 25°C and rated input/output				
Hold up time	20mS(minimum) at 25°C and rated input/output				
Functions					
Overcurrent Protection $\geq 115\%$ of	Current Limiting with automatic recovery				
Rated Output Current[A]	2.3	1.04	0.81	0.58	0.29
Overvoltage Protection $\geq 115\%$ of Rated	Output shutdown(to reset,leave 1minute after shut-off)				
Output Voltage[V]	5.75	13.8	17.25	27.6	55.2
Remote Sense	not available				
Remote On/Off	not available				
Environmental					
Operating Temperature	-5 to +50°C				
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)	140g/enclosed type:160g				
? MTBF [H]	1,000,000				
? Switching Frequency[kHz](typical) *7	45	45	45	45	45

Conditions:

*1 at cold start

*2 at DC130V 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

