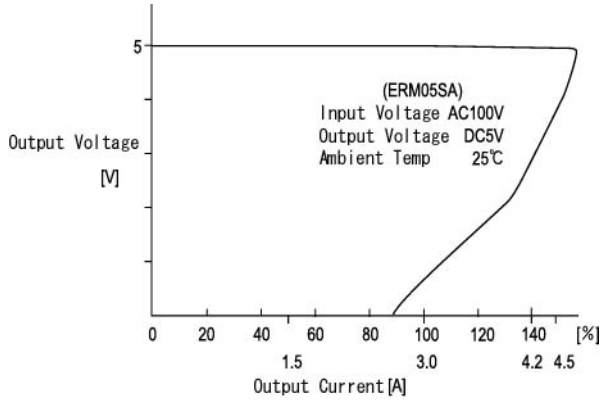
15 WATT AC-DC CONVERTER

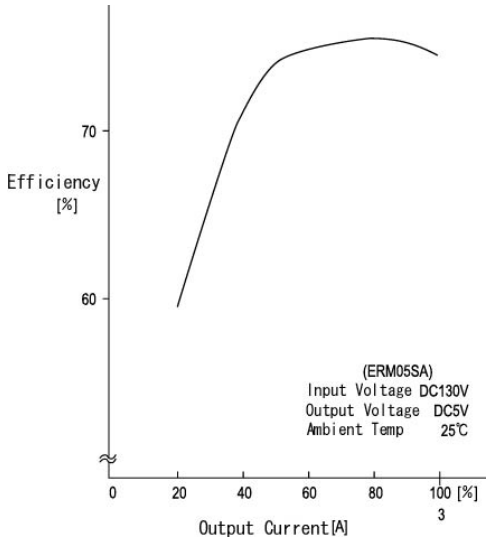
ERM-SA SERIES

Specifications<AC/DC>	Model				
ERM**SA 15WATTS/SINGLE	ERM05SA	ERM12SA	ERM15SA	ERM24SA	ERM48SA
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	74	78	79	80	81

OCP Curve



Efficiency Curve



ETA-USA Tel: 408-778-2793 Fax: 408-779-2753 **e-mail**: sales@eta-usa.com

ETA-USA
Your power supply experts

Specifications<AC/DC>	Model				
ERM**SA 15W ATTS/SINGLE	ERM05SA	ERM12SA	ERM15SA	ERM24SA	ERM48SA
Output Characteristic					
Output Voltage [V]	5	12	15	24	48
Output Current [A]	3.0	1.3	1.0	0.7	0.35
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%/℃				
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℃ and rated input/output				
Hold up time	20mS(minimum) at 25℃ and rated input/output				
Functions					
Overcurrent Protection	Current Limiting with automatic recovery				
≧105% of Rated Output Current[A]	3.15	1.37	1.05	0.74	0.37
Overvoltage Protection	Zener diode clamping				
≧115% of Rated 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℃				
Operating Humidity	85%RH(non-condensing)				
Storage Temperature	-20 to +85℃				
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℃,rated input/output and rated input frequency				
? Line Conducted Noise	Built to meet FCC Part15-B Class B				
? Safety					
? Weight (typical)	220g/enclosed type:270g				
? MTBF [H]	950,000				
? Switching Frequency[kHz](typical) *7	30				

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℃
*5 for 7hour period after 1hour warm-up at 25℃ 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

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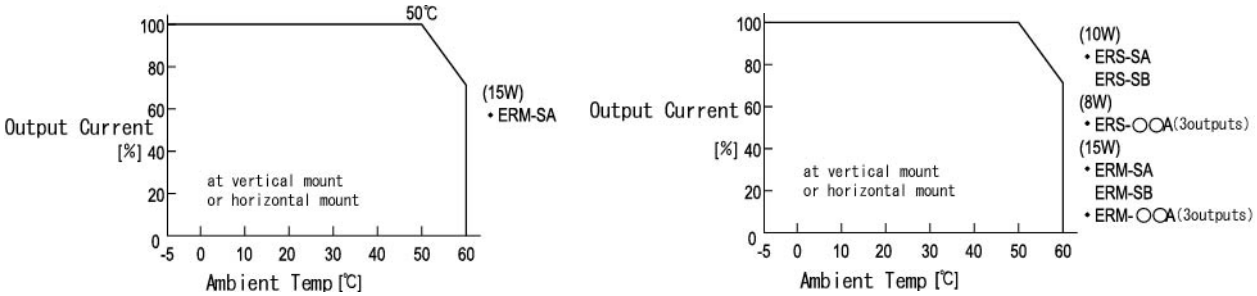
Derating Curve



Dimension Diagram (mm)