

100 WATT AC-DC CONVERTER

BSD-SA-U SERIES

Specifications<AC/DC>	Model								
BSD**SA-U 100WATTS/SINGLE	BSD3.3SA-U	BSD05SA-U	BSD06SA-U	BSD09SA-U	BSD12SA-U	BSD15SA-U	BSD24SA-U	BSD36SA-U	BSD48SA-U
Input Characteristic									
Input Voltage	AC115V								
Input Current	2.2A								
Input Range	AC85-132V								
Input Frequency	50/60Hz								
Input Frequency Range	47-440Hz								
Phase	Single								
Inrush Current *1	17A(maximum) at AC115V								
Efficiency [%] (typical) *2	73	76	78	82	82	84	87	87	88

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BSD**SA-U 100WATTS/SINGLE									
Output Voltage [V]	3.3	5	6	9	12	15	24	36	48
Output Current [A]	20	20	17	11	9	7	5	3.3	2.5
Voltage Adjust Range	2.7-3.63 +/-10% of Rated Output Voltage(at no load within the input range)								
Ripple and Noise [mVp-p](maximum) *3	150	150	160	190	220	250	340	460	580
Regulation									
a.Statistic Line Regulation [mV](maximum)	40	40	48	72	96	120	192	288	384
b.Statistic Load Regulation [mV](maximum)	45	45	54	81	108	135	216	324	432
c.Temperature Coefficient *4	0.025%/C			0.03%/C					
d.Drift[mV](maximum) *5	40	40	45	60	75	90	135	195	255
e.Dynamic Load Regulation [mV](typical) *6	150	150	180	270	360	450	720	1080	1440
f.Recovery Time *6	0.5mS(typical)								
Rise up time	500mS(typical) at 25C and rated input/output								
Hold up time	15mS (minimum) at 25C and rated input/output								
Functions									
Overcurrent Protection = or >103% of Rated Output Current[A]	Current Limiting with automatic recovery								
	20.6	20.6	17.5	11.3	9.3	7.2	5.2	3.4	2.6
Overvoltage Protection = or >114% of Rated Output Voltage[V]	Output shutdown(to reset,leave 1minute after shut-off)								
	3.76	5.7	6.84	10.3	13.7	17.1	27.4	41.0	54.7
Remote Sense	not available								
Remote On/Off	not available								
Environmental									
Operating Temperature	Convection:-10 to +50C/Forced air:-10 to +60C								
Operating Humidity	20 to 85%RH(non-condensing)								
Storage Temperature	-20 to +85C								
Storage Humidity	20 to 85%RH(non-condensing)								
Withstanding Voltage	Primary-Secondary AC1500V for 1minute								
	Primary-Frame Ground AC1500V for 1minute								
	Secondary-Frame Ground AC500V for 1minute								
Isolation Resistance	Primary-Secondary-Frame Ground 50MOhm(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	0.3mA(typical) at 25C,rated input/output and rated input frequency								
Line Conducted Noise	Built to meet FCC Part15-B Class B								
	Built to meet VCCI Class B								
Safety	UL: UL1950								
	CUL:CSA C22.2 No.950								
Weight (typical)	open board type:330g								
MTBF [H]	580,000								
Switching Frequency[kHz](typical)	130	130	130	130	130	130	130	130	140

Conditions:

- *1at cold start
- *2 at DC130V input/rated output
- *3 measured by a bayonet probe at the end of a pair of 5cm long wires terminated with a 100uF electrolytic capacitor and 0.1uF film capacitor in parallel at a 0 to 100MHz bandwidth
- *4 convection at -10 to +50°C/forced air at-10 to +60°C
- *5 for 7hour period after 1hour warm-up at 25°Cand rated input/output
- *6 when output current changed from 25% of rated output current to 75% rapidly at AC100V input