155W Single Output with Battery Charger

HF155W-SB Series

FEATURES

- AC input range selected by switch
- Electrolytic capacitors all 105°C
- To charge lead acid battery by floating charge
- Auto switch when power off (UPS function)
- AC mains failure signal
- Battery low signal
- Free air convection cooling
- Protections: overload/ over voltage/ short circuit
- 5 years limited warranty
- F615 199 x 98 x 50mm

SPECIFICATIONS

Input Voltage	85~132/170~264VAC switchable
Input Current	3.6A/115V, 1.8A/230V
Input Frequency	47~63Hz
Inrush Current	cold start, 20A/115V, 40A/230V
Input Leakage Current	< 1mA/230VAC
Line Regulation (full load)	± 0.5%
Voltage Adjust Range	V1: ± 5%, V2: not adjustable
Output Overload Protection	110~130%, shut off, re-power on to recover
Output Over Voltage Protection	115~150%, shut off, re-power on to recover
Short Circuit Protection	shut off, re-power on to recover
Rise Time	50ms @full load (typical)
Hold up Time	20ms @full load (typical)
Mechanical Feature	enclosed
DC output Indication	green LED on when DC output available
Dimensions	199 x 98 x 50mm (L x W x H)

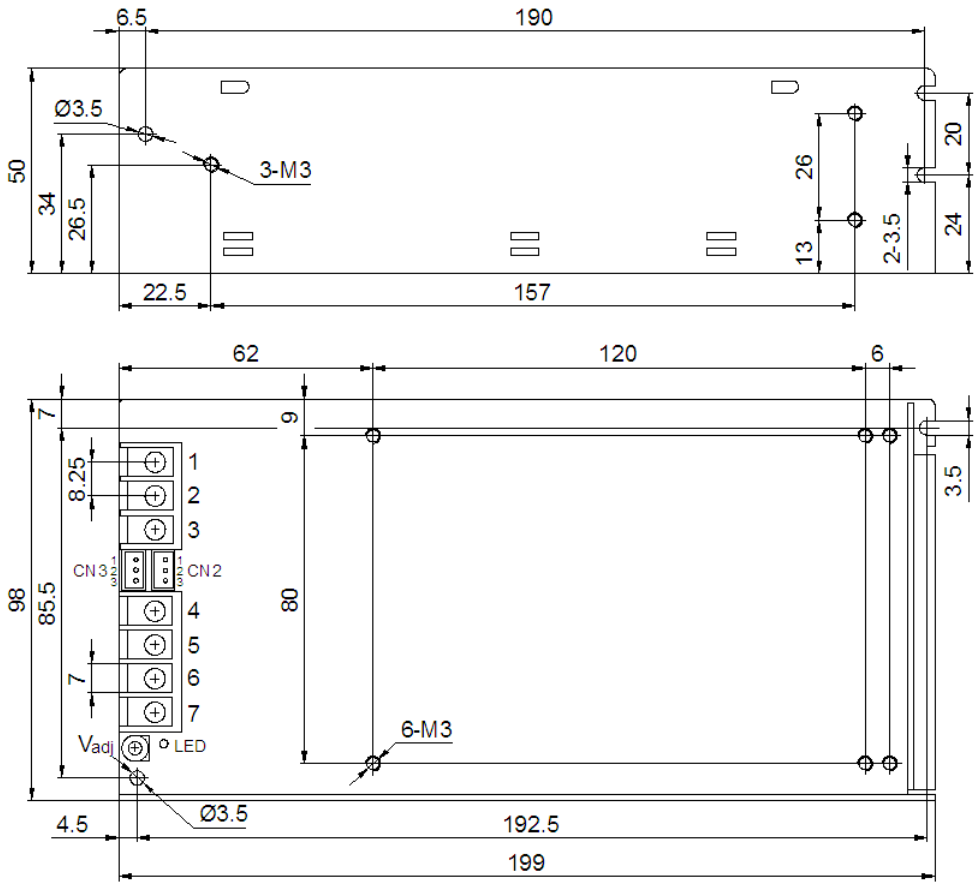
Operating Temperature	-20°C ~+70°C(ref. derating curve)
Storage Temperature	-20°C ~+85°C
Operating Humidity	20%~93%RH(non condensing)
Storage Humidity	20%~95%RH(non condensing)
MTBF	>100,000 hours
Cooling	convection
Safety Standards	GB4943, UL60950, EN60950
EMC Standards	GB9254, EN55022 Class B EN55024, EN61000-3-2,3 EN61000-4-2,3,4,5,6,8,11
Withstand Voltage	I/P -O/P: 3.0KVAC/1min I/P - PE: 1.5KVAC/1min O/P-PE: 0.5KVAC/1min
Vibration	10~150Hz, 2G 10min/1cycle, 30min each along X, Y, Z axes
Connection	7P/8.25mm pitch terminal block
Signal Output CN2,CN3 (refer to drawing)	3P/2.50mm, 2501WV-3P wafer 2501-T terminal, 2501H-3P housing Manufacturer: Taiwan CKM
Packing	0.78kgs, 24pcs/19.5kgs/0.045CBM per carton

Model No.	DC Output	Voltage Adjust Range	Voltage Tolerance	Charging Current	Battery Low Voltage Protection	Ripple & Noise (max.)	Efficiency
HF155W-SB-13.8	13.8V 11.5A	± 5%	±1%	0.5A	9.6V ± 0.5V	120mVp-p	82%
	13.3V 0.5A (charger)	not adjustable	±3%				
HF155W-SB-27.6	27.6V 5.5A	± 5%	±1%	0.5A	19.6V ± 0.5V	150mVp-p	83%
	27.1V 0.5A (charger)	not adjustable	±3%				

NOTE

1. All parameters are measured at 230VAC input, rated load and 25°C ambient temperature.
2. Line regulation is measured from low line to high line at rated load.
3. Load regulation is measured from 0% to 100% of rated load for single output models. For multi-output models, it is measured from 20% to 100% of rated load, and other output at 60% rated load.
4. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
5. The power supply is regarded as a component which will be installed into the final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

Drawing



Length of assembly screw: max. 6mm

Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,6	COMMON “-” of DC & BATTERY OUTPUT
2	AC/N	5	BATTERY “+” POLE
3	PE	7	DC OUTPUT +V

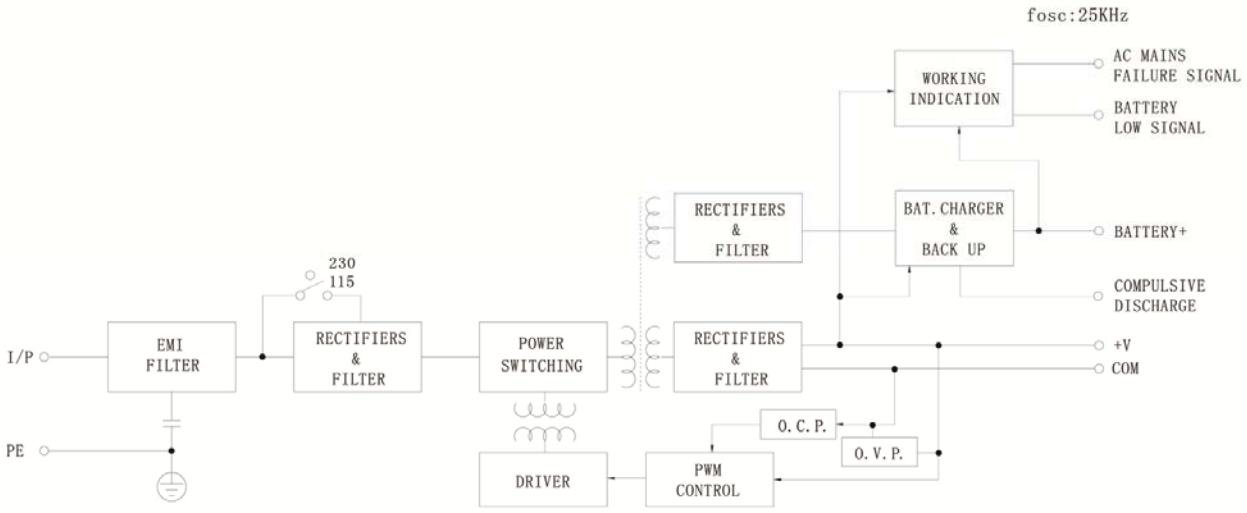
CN2 Pin No. Assignment

Pin No.	Assignment
1	Battery low signal (low level < 0.7V when battery works normally, high level > 3V when battery low. The battery will be switched off immediately when it gives the battery low signal.)
2	GND
3	AC mains failure signal (low level < 0.7V when AC power on, high level > 3V when AC mains fails)

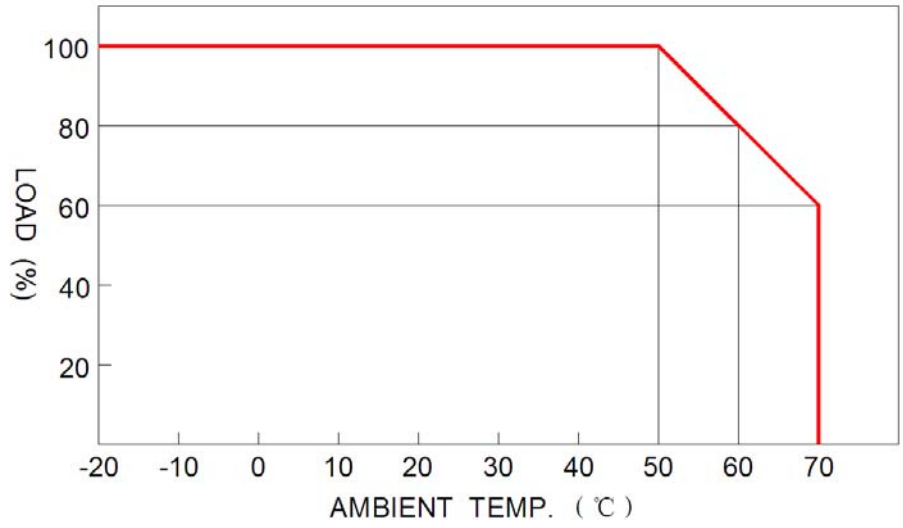
CN3 Pin No. Assignment

Pin No.	Assignment
1,2,3	Compulsive battery discharge triggering connector: you may link pin 1 (or pin 2) and pin 3, then connect to an outside switch for compulsive discharge of the battery.

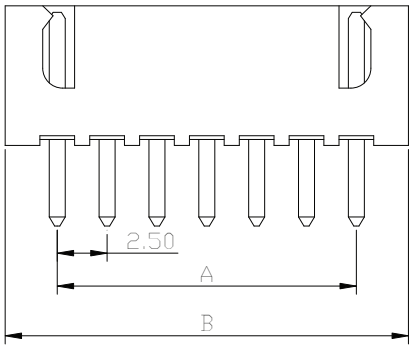
Block Diagram

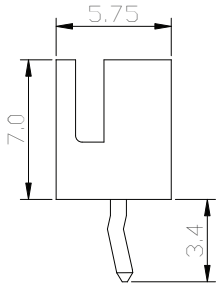


Derating Curve



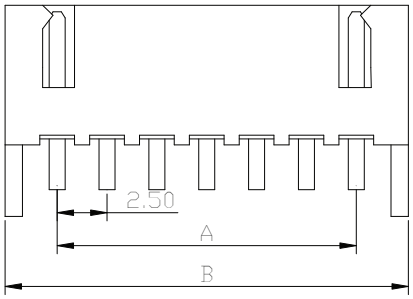
Parts NO:2501-WV WAFER(180°)

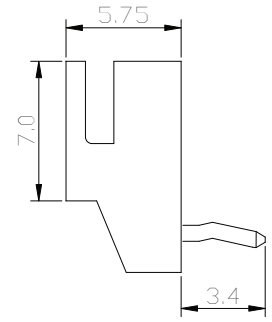




Material:pin/post:Brass Tin-plated
Wafer:Nylon 66 UL 94V-0
Circuits:2-15 circuits available
Insulation resistance:1000MΩ min
Withstand voltage:1000V AC/minute
Current rating :3A AC/DC
voltage rating:250V AC/DC

Parts NO:2501-WR WAFER(90°)

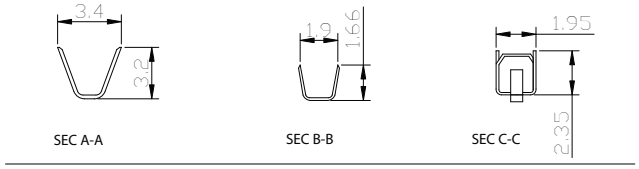


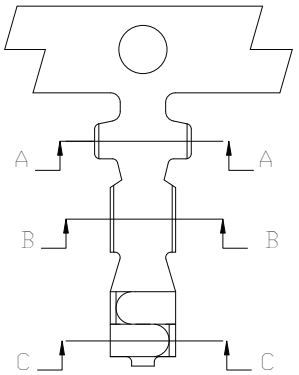


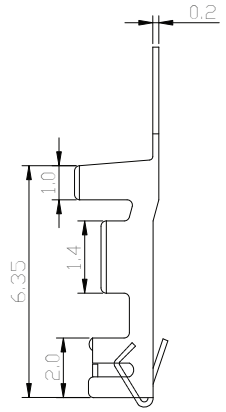
Dimension mm

Circuits	Part No	A	B
2	2051WV/WR-2P	2.50	7.5
3	2051WV/WR-3P	5.00	10.0
4	2051WV/WR-4P	7.50	12.5
5	2051WV/WR-5P	10.00	15.0
6	2051WV/WR-6P	12.50	17.5
7	2051WV/WR-7P	15.00	20.0
8	2051WV/WR-8P	17.50	22.5
9	2051WV/WR-9P	20.00	25.0
10	2051WV/WR-10P	22.50	27.5
11	2051WV/WR-11P	25.00	30.0
12	2051WV/WR-12P	27.50	32.5
13	2051WV/WR-13P	30.00	35.0
14	2051WV/WR-14P	32.50	37.5
15	2051WV/WR-15P	35.00	40.0

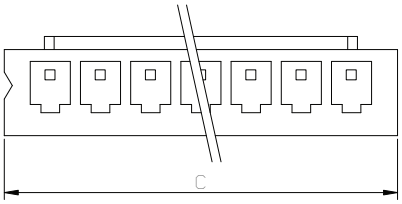
TERMINAL
Parts NO:2501-T
Material:Phosphor bronze or brass
Finish:Tin-plated
Accept housing:2501-H
Applicable wires:AWG#28-#22
Insulation O. D. :1.2-1.76mm
Q'ty/reel :8,000pcs

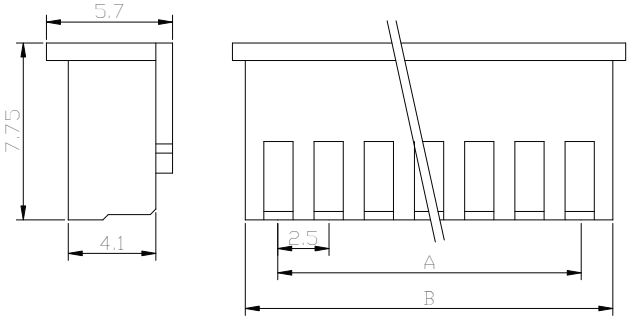






HOUSING
Parts NO:2501-H
Material:Nylon 66 94V-2
Circuits:2-15 circuits available
Insulation resistance:1000M¦, min
Withstand voltage:1000V AC/minute
Current rating :3A AC/DC
voltage rating:250V AC/DC





Dimension mm

Circuits	Part No	A	B	C
2	2501H-2P	2.50	5.7	7.3
3	2501H-3P	5.00	8.2	9.8
4	2501H-4P	7.50	10.7	12.3
5	2501H-5P	10.00	13.2	14.8
6	2501H-6P	12.50	15.7	17.3
7	2501H-7P	15.00	18.2	19.8
8	2501H-8P	17.50	20.7	22.3
9	2501H-9P	20.00	23.2	24.8
10	2501H-10P	22.50	25.7	27.3
11	2501H-11P	25.00	28.2	29.8
12	2501H-12P	27.50	30.7	32.3
13	2501H-13P	30.00	33.2	34.8
14	2501H-14P	32.50	35.7	37.3
15	2501H-15P	35.00	38.2	39.8

Manufacturer: Taiwan CKM