

Quality Engineering Test Report

SERIES: SD-100D

100W DC-DC SINGLE OUTPUT SWITCHING POWER SUPPLY

SAMPLE:

A. SD-100D-5 5V / 20A

B. SD-100D-12 12V / 8.5A

C. SD-100D-24 24V / 4.2A

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	DC INPUT VOLTAGE RANGE	I/P : TESTING SPEC : 72VDC~144VDC (85VAC~132VAC) O/P : FULL LOAD	A:44.58~132VAC	P
2	LINE REGULATION	I/P : 85~132VAC SPEC : A:±0.5% O/P : FULL LOAD B:±0.3% C:±0.2%	A: +0.1185%~+0.1185% B: -0%~+0% C: 0%~+0.024%	P
3	LOAD REGULATION	I/P : 115VAC SPEC : A:±0.5% O/P : MIN. TO FULL LOAD B:±0.3% C:±0.2%	A: -0.237%~+0.356% B: -0.049%~+0.099% C: -0.049%~+0.049%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P : 85132VAC SPEC : A:±2% O/P : MIN. TO FULL LOAD B:±1% C:±1%	A: -0.49 %~+0% B: -0.149%~+0.058% C: -0.103%~+0.024	P
5	RIPPLE&NOISE	I/P : 115VAC SPEC : A:100mVp-p O/P : FULL LOAD B:120mVp-p C:150mVp-p	A: 3mV B: 2.9mV C: 1.8mV	P
6	DC INPUT CURRENT	I/P : 96VAC SPEC : 1.8A O/P : FULL LOAD	A: 1.31A	P
7	O/P VOLTAGE ADJ. RANGE	I/P : 115VAC SPEC : A:4.5~5.5V O/P : MIN. LOAD B:11~16V C:23~30V	A:4.36V~6.2V B:9.4V~16.32V C:21.78V~33.1V	P
8	SET UP TIME	I/P : 115VAC SPEC : 2S O/P : FULL LOAD	A:0.8S	P
9	EFFICIENCY	I/P : 96VDC SPEC : A:76% O/P : FULL LOAD B:80% C:83%	A: 77.3% B: 81.68% C: 82.006%	P
10	OVER LOAD PROTECTION	I/P : 115VAC SPEC : 105%~135% O/P : TESTING	A: 130% B: 120% C: 124%	P
11	OVER VOLTAGE PROTECTION	I/P : 115VAC SPEC : A:5.75V~6.75V O/P : 10% LOAD B:16.8V~20V C:31.5V~37.5V	A: 6.45V B: 17.5 V C: 33.89V	P
12	INSULATION RESISTANCE	SPEC : I/P-O/P : 500VDC/100M Ohms MIN. I/P-FG : 500VDC/100M Ohms MIN. O/P-FG : 500VDC/100M Ohms MIN.	A: I/P-O/P : >100M Ohms I/P-FG : >100M Ohms O/P-FG : >100M Ohms	P

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13	DIELECTRIC / WITHSTAND VOLTAGE	SPEC : I/P-O/P : 1500VAC/ 1 min (10mA CUT-OFF). I/P-FG : 1500VAC/ 1 min (10mA CUT-OFF) O/P-FG : 500VAC/ 1 min (10mA CUT-OFF)	A: I/P-O/P : <1.582mA I/P-FG : <5.67mA O/P-FG : <1.145mA	P
14	BURN-IN TEST	I/P : 48VDC TA : 24.5°C O/P:FULL LOAD BURN-IN DURATION : 1 hrs	A:AFTER 12 hrs NON BREAK	P
15	CRITICAL COMPONENT RECORD (FOR QC INSPECTION REFERENCE ONLY)	A: FUSE : 5AL/250V 5x20 G INPUT DIODE : 1N5401 LINE FILTER : LF TF-096B EE-25 TRANSFOMER : MT TF-312-R1 EER-28L POWER SWITCHER : TRFP250 TO-3P OUTPUT DIODE : D9202 TO-3P OUTPUT CAPACITOR : 1000uF/25V(v) 105°C HL INPUT CAPACITOR : 220uF/100V(v) HL 105°C P.C.B : SD-100N-R2 FR-4 2 OZ DS		
DATE	SAMPLE	TEST RESULT	TEST	APPROVAL
20011122	SD-100D	PASS	VINCENT	Max Lin