

Quality Engineering Test Report

SERIES: DCW03A

3W DC-DC DUAL OUTPUT CONVERTER

SAMPLE:	A:DCW03A-05	V1:+5V / 300mA
		V2: -5V / 300mA
	B:DCW03A-12	V1:+12V / 125mA
		V2: -12V / 125mA
	C:DCW03A-15	V1:+15V / 100mA
		V2: -15V / 100mA

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	DC INPUT VOLTAGE RANGE	I/P : TESTING SPEC : 9~18VDC O/P : FULL LOAD	A:6.5~18VDC	P
2	LINE REGULATION	I/P : 9~18VDC SPEC : $\pm 0.2\%$ O/P : FULL LOAD	A: V1: -0%~+0% V2: -0.15%~+0% B: V1: -0%~+0% V2: -0%~+0% C: V1: -0%~+0% V2: -0%~+0%	P
3	LOAD REGULATION	I/P : 12VDC SPEC : $\pm 0.2\%$ O/P : MIN. TO FULL LOAD	A: V1: -0%~+0% V2: -0.15%~+0% B: V1: -0.02%~+0.08% V2: -0.04%~+0.13% C: V1: -0.02%~+0.01% V2: -0.01%~+0.02%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P : 9~18VDC SPEC : NONE O/P : MIN. TO FULL LOAD	A: V1: -2.10%~+2.00% V2: -2.00%~+2.20% B: V1: -1.27%~+1.04% V2: -1.05%~+1.26% C: V1: -1.11%~+0.86% V2: -0.89%~+1.04%	P
5	RIPPLE & NOISE	I/P : 12VDC SPEC : 100mV O/P : FULL LOAD	A: V1:23mV V2:20mV B: V1:13mV V2:10mV C: V1:15mV V2:15mV	P
6	DC INPUT CURRENT	I/P : 12VDC SPEC : NONE O/P : FULL LOAD	A:0.32A	P
7	OVER LOAD PROTECTION	I/P : 12VDC SPEC : NONE O/P : TESTING	A:173% B:225% C:210%	P
8	O/P VOLTAGE ACCURACY	I/P : 12VDC SPEC : $\pm 2\%$ O/P : MIN. LOAD	A: V1:0% V2:0% B: V1:+0.48% V2:+0.78% C: V1:-0.63% V2:-0.31%	P

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT									
9	SET UP TIME	I/P : 12VDC SPEC : NONE O/P : FULL LOAD	A:1.54mS	P									
10	HOLD UP TIME	I/P : 12VDC SPEC : NONE O/P : FULL LOAD	A:0.21mS	P									
11	EFFICIENCY	I/P : 12VDC SPEC : 74% O/P : FULL LOAD	A:78.1% B:83.2% C:80.6%	P									
12	INSULATION RESISTANCE	SPEC : I/P – O/P 500VDC/1000MΩ MIN.	A:I/P – O/P > 100M Ω	P									
13	DIELECTRIC / WITHSTAND VOLTAGE	SPEC : I/P – O/P : 1000VDC/ 1 min (10mA CUT-OFF)	A:NO BREAK I/P – O/P : < 0.02mA	P									
14	BURN-IN TEST	I/P:12VDC O/P:FULL LOAD TA:25 °C BURN-IN DURATION : 2 hrs	A:NO BREAK B:NO BREAK C:NO BREAK	P									
15	TEMPERATURE RISE TEST ΔT OF PARTS	<p style="text-align: center;">A:I/P : 12VDC AFTER 4 hrs BURN-IN O/P : FULL LOAD TA : 25 °C</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>POSITION</th> <th>SAMPLE</th> <th>TEMP</th> <th>ΔT</th> </tr> </thead> <tbody> <tr> <td>CASE</td> <td>DCW03A-05</td> <td>39.7°C</td> <td>14.7°C</td> </tr> </tbody> </table>			POSITION	SAMPLE	TEMP	ΔT	CASE	DCW03A-05	39.7°C	14.7°C	P
POSITION	SAMPLE	TEMP	ΔT										
CASE	DCW03A-05	39.7°C	14.7°C										
16	CONSTRUCTION INSPECTION (FOR QC INSPECTION REFERENCE ONLY)	1. PACKING : 軌道型塑膠加紙盒包裝 2. MARKING : MODEL 3. MECHANICAL : SIX-SIDED SHIELD METAL CASE 4. DIMENSIONS : WXHxD=31.8X12.2X20.3mm											
DATE	SAMPLE	TEST RESULT	TEST	APPROVAL									
1998.8.15	DCW03A-05	PASS	鄭讚國	MAX LIN									
1999.1.28	DCW03A-12 DCW03A-15	PASS	鄭讚國	MAX LIN									