

# Quality Engineering Test Report

**SERIES: SPR01M 1W REGULATED SINGLE OUTPUT DC-DC CONVERTER**

**SAMPLE:**  
**A.SPR01M-05 +5VDC / 200mA**  
**B.SPR01M-09 +9VDC / 111mA**  
**C.SPR01M-12 +12VDC / 84mA**

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT								
1	DC INPUT VOLTAGE RANGE	I/P:TESTING SPEC: 10.8~13.2VDC O/P:FULL LOAD	A:9.8~13.2VDC	P								
2	LINE REGULATION	I/P: 10.8~13.2VDC SPEC: ±1% O/P: FULL LOAD	A: -0.04% ~ +0.08% B: -0.03% ~ +0.03% C: -0.01% ~ +0.01%	P								
3	LOAD REGULATION	I/P: 12VDC SPEC: ±1% O/P:20% TO FULL LOAD	A: -0.1% ~ +0.18% B: -0.18% ~ +0.11% C: -0.66% ~ +0.12%	P								
4	OUTPUT VOLTAGE TOLERANCE	I/P: 10.8~13.2VDC SPEC: NONE O/P:20% TO FULL LOAD	A: -0.14% ~ +0.28% B: -0.18% ~ +0.12% C: -0.69% ~ +0.12%	P								
5	RIPPLE&NOISE	I/P: 12VDC SPEC: 100mV O/P:FULL LOAD	A:10mV B:10mV C:10mV	P								
6	DC INPUT CURRENT	I/P: 12VDC SPEC: 141mA O/P:FULL LOAD	A:120.9mA	P								
7	OVER LOAD PROTECTION	I/P: 12VDC SPEC:NONE O/P:TESTING	A:195% B:180% C:185%	P								
8	O/P VOLTAGE ACCURACY	I/P: 12VDC SPEC: ±2% O/P:FULL LOAD	A:-0.7% B:+0.3% C:+1.0%	P								
9	SET UP TIME	I/P: 12VDC SPEC: NONE O/P:FULL LOAD	A:0.76mS	P								
10	EFFICIENCY	I/P: 12VDC SPEC: A:59% O/P:FULL LOAD B:60% C:62%	A:67.3% B:60.1% C:63.6%	P								
11	INSULATION RESISTANCE	SPEC:I/P-O/P 500VDC/100M Ohms MIN.	A:I/P-O/P >100M Ohms	P								
12	DIELECTRIC / WITHSTAND VOLTAGE	SPEC: I/P- O/P: 1000VDC/ 1 min (10mA CUT-OFF)	A:NO BREAK I/P-O/P :<0.02mA	P								
13	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								
14	TEMPERATURE RISE TEST T rise OF PARTS	A:I/P :12VDC AFTER 4 hrs BURN-IN O/P :FULL LOAD TA:25°C	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>POSITION</th> <th>SAMPLE</th> <th>TEMP</th> <th>T rise</th> </tr> </thead> <tbody> <tr> <td>CASE</td> <td>SUS01M-05</td> <td>44.0°C</td> <td>19.0°C</td> </tr> </tbody> </table>	POSITION	SAMPLE	TEMP	T rise	CASE	SUS01M-05	44.0°C	19.0°C	P
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15	CONSTRUCTION INSPECTION ( FOR QC INSPECTION REFERENCE ONLY )	1. PACKING : 軌道型塑膠包裝 2. MARKING : MODEL 3. MECHANICAL : PLASTIC CASE 4. DIMENSIONS : WXHxD=19.6X10.14X6.1mm, PIN : 3.8mm		
DATE	SAMPLE	TEST RESULT	TEST	APPROVAL
2000.4.26	SPR01M-05 SPR01M-12	PASS	T.K.CHENG	MAX.LIN
2000.7.3	SPR01M-09	PASS	T.K.CHENG	MAX.LIN