



Test Report : SBTN01L-09

1W SMD Package DC-DC Unregulated Converter

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

■ SAFETY TEST

Safety Test

■ RELIABILITY TEST

Environment Test

Other test

DESIGN VERIFY TEST
OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE ACCURACY	-2%~+2%	I/P:5VDC O/P:FULL LOAD Ta:25°C	-2.4%	P
2	RIPPLE & NOISE	75mVp-p (Max)	I/P:5VDC O/P:FULL LOAD Ta:25°C	16mVp-p	P
3	LINE REGULATION	-12% ~ +12% (Max)	I/P:4.5VDC ~5.5VDC O/P:FULL LOAD Ta:25°C	-11.75% ~ +11.96%	P
4	LOAD REGULATION	-8% ~ +8% (Max)	I/P:5VDCC O/P:FULL ~MIN LOAD Ta:25°C	-3.86% ~ +3.19%	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	EFFICIENCY	77%	I/P:5VDC O/P:FULL LOAD Ta:25°C	77.35%	P
2	DC CURRENT	260mA FULL LOAD 35mA NO LOAD	I/P:5VDC O/P:FULL LOAD Ta:25°C	252mA 26mA	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	SHORT PROTECTION	MOMENTARY	I/P:5.5VDC O/P:FULL LOAD Ta:25°C	MOMENTARY	P

SAFETY TEST
SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:1.5KVDC/min	I/P-O/P:1.5KVDC/min Ta:25°C	I/P-O/P:0.02mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ	I/P-O/P:500VDC Ta:25°C	I/P-O/P:>100MΩ NO DAMAGE	P

■ RELIABILITY TEST

ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT										
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 4HRS I/P:5VDC O/P:100% LOAD Ta=25°C 2. HI AMBIENT BURN-IN : 10HRS I/P:5VDC O/P:100% LOAD Ta=85°C			P										
<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr style="background-color: #cccccc;"> <th style="width: 5%;">NO</th> <th style="width: 10%;">Position</th> <th style="width: 30%;">P/N</th> <th style="width: 10%;">1</th> <th style="width: 10%;">2</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">CASE</td> <td style="text-align: center;">CENTER</td> <td style="text-align: center;">37.9°C</td> <td style="text-align: center;">97.9°C</td> </tr> </tbody> </table>						NO	Position	P/N	1	2	1	CASE	CENTER	37.9°C	97.9°C
NO	Position	P/N	1	2											
1	CASE	CENTER	37.9°C	97.9°C											
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOURS	I/P : 5VDC O/P : 100% LOAD Ta= -40°C	TEST : OK	P										

OTHER

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	MTBF	MIL-KDBK-217F NOTICES 2 PARTS COUNT TOTAL FAILURE RATE : 1.13390 M.T.B.F : 881914.32 HRS			P

TEST RESULT	TESTER	APPROVAL
PASS	ARCHEN	VINCENT ZENG