



# Test Report : SBTN01N-15N

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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

Other Test

**DESIGN VERIFY TEST**
**OUTPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDITC
1	VOLTAGE ACCURACY	-5.0% ~ +5.0 %	I/P:24VDC O/P:FULL LOAD Ta:25°C	-1.57%	P
2	RIPPLE & NOISE	100 mVp-p	I/P:24VDC O/P:FULL LOAD Ta:25°C	35 mV	P
3	LINE REGULATION	-12% ~ +12%	I/P:21.6VDC~26.4VDC O/P:FULL LOAD Ta:25°C	-10.65% ~ -10.77%	P
4	LOAD REGULATION	-10% ~ +10%	I/P:24VDC O/P:10% LOAD~FULL LOAD Ta:25°C	-1.01% ~ +1.45%	P

**INPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDITC
1	EFFICIENCY	81% (Typ)	I/P:24VDC O/P:FULL LOAD Ta:25°C	83.72%	P
2	DC CURRENT	54 mA / FULL LOAD 11 mA / NO LOAD	I/P:24VDC O/P:NO / FULL LOAD Ta:25°C	48.22 mA / FULL LOAD 5.66 mA / NO LOAD	P

**PROTECTION FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDITC
1	SHORT PROTECTION	0.5 second max.	I/P:26.4VDC O/P:FULL LOAD Ta:25°C	OK	P

**SAFETY TEST**
**SAFETY TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDITC
1	WITHSTAND VOLTAGE	I/P-O/P:2K VDC/min	I/P-O/P:2K VDC/min Ta:25°C	I/P-O/P: 0.002mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>10GΩ	I/P-O/P:500 VDC Ta:25°C	I/P-O/P>10GΩ NO DAMAGE	P

**■ RELIABILITY TEST****OTHER**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDITC
1	MTBF	MIL-HDBK-217F,GB,25°C TOTAL FAILURE RATE : 1.04712 M.T.B.F : 995 KHRS			P

TEST RESULT	TESTER	APPROVAL
PASS	ARCHEN HSIAO	PETER CHENG