



# Test Report : DETN01N-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

Environment Test

Other test

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

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE ACCURACY	-5.0% ~ +5.0 %	I/P:24VDC O/P:FULL LOAD Ta:25°C	-0.19% +0.10%	P
2	RIPPLE & NOISE	100 mVp-p	I/P:24VDC O/P:FULL LOAD Ta:25°C	36 mV 32 mV	P
3	LINE REGULATION	-12% ~ +12%	I/P:21.6VDC~26.4VDC O/P:FULL LOAD Ta:25°C	-10.67% ~ +10.71% -10.64% ~ +10.71%	P
4	LOAD REGULATION	-8% ~ +8%	I/P:24VDC O/P:10% LOAD~FULL LOAD Ta:25°C	-0.89% ~ +1.69% -0.85% ~ +1.65%	P

**INPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	EFFICIENCY	82% (Typ)	I/P:24VDC O/P:FULL LOAD Ta:25°C	83.48%	P
2	DC CURRENT	55 mA / FULL LOAD 11 mA / NO LOAD	I/P:24VDC O/P:NO / FULL LOAD Ta:25°C	49.46mA / FULL LOAD 6.8 mA / NO LOAD	P

**PROTECTION FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	SHORT PROTECTION	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	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:3K VDC/min	I/P-O/P:3K 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**
**ENVIRONMENT TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 4 HOURS	I/P:24VDC O/P: FULL LOAD Ta= -40°C	TEST : OK	P

**OTHER**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	MTBF	MIL-HDBK-217F,GB,25°C TOTAL FAILURE RATE : 0.95693 M.T.B.F : 1045 KHRS			P

TEST RESULT	TESTER	APPROVAL
PASS	ARCHEN HSIAO	PETER CHENG