



# Test Report : DETN01N-12N

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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	VERDICT
1	VOLTAGE ACCURACY	-5.0% ~ +5.0 % (Max)	I/P:24VDC O/P:FULL LOAD Ta:25°C	-0.98% -0.68%	P
2	RIPPLE & NOISE	100 mVp-p (Max)	I/P:24VDC O/P:FULL LOAD Ta:25°C	30 mV 35 mV	P
3	LINE REGULATION	-12% ~ +12% (Max)	I/P:21.6VDC~26.4VDC O/P:FULL LOAD Ta:25°C	-10.80% ~ +10.82% -10.75% ~ +10.81%	P
4	LOAD REGULATION	-8% ~ +8% (Max)	I/P:24VDC O/P:10% LOAD~FULL LOAD Ta:25°C	-0.88% ~ +1.73% -0.87% ~ +1.60%	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	83.11%	P
2	DC CURRENT	55 mA / FULL LOAD (Max) 11 mA / NO LOAD (Max)	I/P:24VDC O/P:NO / FULL LOAD Ta:25°C	50.12 mA / FULL LOAD 6.3 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**
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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****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