



Test Report : DETN02N-12N

2W 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 %	I/P:12VDC O/P:FULL LOAD Ta:25°C	-1.47% -1.43%	P
2	RIPPLE & NOISE	150 mVp-p	I/P:12VDC O/P:FULL LOAD Ta:25°C	28 mV 36 mV	P
3	LINE REGULATION	-12% ~ +12%	I/P:10.8VDC~13.2VDC O/P:FULL LOAD Ta:25°C	-11.06% ~ +10.95% -11.05% ~ +10.95%	P
4	LOAD REGULATION	-8% ~ +8%	I/P:12VDC O/P:10% LOAD~FULL LOAD Ta:25°C	-1.52% ~ +1.89% -1.46% ~ +1.83%	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	EFFICIENCY	82% (Typ)	I/P:12VDC O/P:FULL LOAD Ta:25°C	83.91%	P
2	DC CURRENT	104 mA / FULL LOAD 15 mA / NO LOAD	I/P:12VDC O/P:NO / FULL LOAD Ta:25°C	97.14 mA / FULL LOAD 8.45 mA / NO LOAD	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	SHORT PROTECTION	5 second max	I/P:13.2VDC 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**OTHER**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	MTBF	MIL-HDBK-217F,GB,25°C TOTAL FAILURE RATE : 1.12866 M.T.B.F : 886 KHRS			P

TEST RESULT	TESTER	APPROVAL
PASS	ARCHEN HSIAO	PETER CHENG