

Model : DKA30A-12 30W DC-DC Dual Output Converter
 V1 : +12V / 125~1250mA
 V2 : -12V / 125~1250mA

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OUTPUT VOLTAGE ACCURACY	V1:-2%~+2% (Max) V2:-2%~+2% (Max)	I/P: 12VDC O/P:50% LOAD Ta:25°C	V1:+0.7% V2:+0.8%	P
2	RIPPLE & NOISE	V1:100mVp-p (Max) V2:100mVp-p (Max)	I/P:12VDC O/P:FULL LOAD Ta:25°C	V1:20mVp-p V2:20mVp-p	P
3	LINE REGULATION	V1:-0.5%~+0.5% (Max) V2:-0.5%~+0.5% (Max)	I/P:9VDC ~18VDC O/P:FULL LOAD Ta:25°C	V1: -0.1%~+0.1% V2: -0.1%~+0.1%	P
4	LOAD REGULATION	V1:-0.5%~+0.5% (Max) V2:-0.5%~+0.5% (Max)	I/P:12VDC O/P:FULL ~MIN LOAD Ta:25°C	V1: -0.1%~+0.1% V2: -0.1%~+0.1%	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	INPUT VOLTAGE RANGE	9VDC~18VDC (Typ)	I/P:TESTING O/P:FULL LOAD Ta:25°C	8.4V~18Vdc	P
2	EFFICIENCY	80% (TYP)	I/P:12VDC O/P:FULL LOAD Ta:25°C	85.6%	P
3	INPUT CURRENT	3.2A (Typ.) FULL LOAD 40mA (Typ.) NO LOAD	I/P:12VDC O/P:TEST Ta:25°C	3.04A / FULL LOAD 40mA / NO LOAD	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	YES	I/P:12VDC O/P:TESTING Ta:25°C	120% HICCUP MODE AUTO-RECOVER	P
2	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P:18VDC O/P:FULL LOAD Ta:25°C	NO DAMAGE HICCUP MODE AUTO-RECOVER	P

CONTROL FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	REMOTE CONTROL	Power on >5.5V (typ) or open Power off <1.2V (typ) or short	I/P:12VDC O/P:FULL LOAD Ta:25°C	Power on>3.8Vdc Power off<3.4Vdc	P
2	TRIM	+10%~-10%(Typ)	Trim ~ +Vout Trim DOWN Trim ~ -Vout Trim UP Using 500k ohm VR	Trim DOWN -29% Trim UP +10%	P

ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT							
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 24HRS I/P:12VDC O/P: FULL LOAD Ta= 25°C			P							
			<table border="1"><thead><tr><th>Position</th><th>P/N</th><th>TEMP Ta=25°C</th></tr></thead><tbody><tr><td>FRONT</td><td>CENTER</td><td>50.3°C</td></tr></tbody></table>	Position		P/N	TEMP Ta=25°C	FRONT	CENTER	50.3°C		
Position	P/N	TEMP Ta=25°C										
FRONT	CENTER	50.3°C										
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOURS	I/P:12VDC O/P: 100% LOAD Ta= -10°C	TEST : OK	P							
3	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 96 HOURS IN CHAMBER ON CONTROL 71°C NO DAMAGE	I/P:12VDC O/P:FULL LOAD Ta=71°C HUMIDITY= 95 %R.H	TEST : OK	P							

SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:1000 VDC/min	I/P-O/P:1000 VDC/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:500 VDC Ta:25°C	I/P-O/P>100MΩ NO DAMAGE	P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2003.6.25	DKA30A-12	PASS	PETER CHENG	MAX LIN