

# Quality Engineering Test Report

**SERIES: DKE10A 10W DC-DC DUAL OUTPUT CONVERTER**

<b>SAMPLE:</b>	<b>A:</b>	<b>DKE10A-05</b>	<b>V1: +5V / 1000mA</b> <b>V2: -5V / 1000mA</b>
	<b>B:</b>	<b>DKE10A-12</b>	<b>V1:+12V / 420mA</b> <b>V2:-12V / 420mA</b>
	<b>C:</b>	<b>DKE10A-15</b>	<b>V1:+15V / 333mA</b> <b>V2:-15V / 333mA</b>

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	DC INPUT VOLTAGE RANGE	I/P : TESTING      SPEC : 9~18VDC O/P : FULL LOAD	A:7.3~18VDC	P
2	LINE REGULATION	I/P : 9~18VDC      SPEC : $\pm 0.3\%$ O/P : FULL LOAD	A: V1: -0% ~ +0% V2: -0.2% ~ +0% B: V1: -0% ~ +0% V2: -0% ~ +0% C: V1: -0.2% ~ +0% V2: -0.1% ~ +0.1%	P
3	LOAD REGULATION	I/P : 12VDC      SPEC : $\pm 2\%$ O/P : MIN. TO FULL LOAD	A: V1: -0% ~ +0% V2: -0.2% ~ +0% B: V1: -0.1% ~ +0.1% V2: -0.1% ~ +0.1% C: V1: -0.1% ~ +0% V2: -0.1% ~ +0%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P : 9~18VDC      SPEC : NONE O/P : MIN. TO FULL LOAD	A: V1: -2.8% ~ +3.0% V2: -3.0% ~ +2.8% B: V1: -1.6% ~ +1.7% V2: -1.8% ~ +1.5% C: V1: -0.2% ~ +0.1% V2: -0.1% ~ +0.1%	P
5	RIPPLE & NOISE	I/P : 12VDC      SPEC : A: V1:50mV O/P : FULL LOAD      V2:50mV B: V1:60mV V2:60mV C: V1:60mV V2:60mV	A: V1: 18mV V2: 20mV B: V1: 20mV V2: 20mV C: V1: 27mV V2: 25mV	P
6	DC INPUT CURRENT	I/P : 12VDC      SPEC : NONE O/P : FULL LOAD	A:1.05A	P
7	O/P VOLTAGE ACCURACY	I/P : 12VDC      SPEC : $\pm 2\%$ O/P : MIN. LOAD	A: V1: +1.4% V2: +1.4% B: V1: +0.9% V2: +0.7% C: V1: +0.1% V2: +0.2%	P
8	SET UP TIME	I/P : 12VDC      SPEC : NONE O/P : FULL LOAD	A:328mS	P
9	EFFICIENCY	I/P : 12VDC      SPEC : 76% O/P : FULL LOAD	A: 78.9% B: 83.8% C: 83.5%	P

NEXT

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT							
10	OVER LOAD PROTECTION	I/P : 12VDC O/P : TESTING SPEC : NONE	A:158% B:174% C:164%	P							
11	INSULATION RESISTANCE	SPEC : I/P – O/P 500VDC/100MΩ MIN.	I/P – O/P > 100M Ω	P							
12	DIELECTRIC / WITHSTAND VOLTAGE	SPEC : I/P – O/P : 500VDC/ 1 min (10mA CUT-OFF)	I/P – O/P : < 0.5mA	P							
13	BURN-IN TEST	I/P: 12VDC TA:25 °C O/P:FULL LOAD BURN-IN DURATION : 4 hrs	A:NO BREAK B:NO BREAK C:NO BREAK	P							
14	TEMPERATURE RISE TEST ΔT OF PARTS	A:I/P : 12VDC O/P : FULL LOAD AFTER 4 hrs BURN-IN TA : 25 °C <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>POSITION</th> <th>SAMPLE</th> <th>TEMP</th> <th>ΔT</th> </tr> </thead> <tbody> <tr> <td>CASE</td> <td>DKE10A-05</td> <td>40.9°C</td> <td>15.9°C</td> </tr> </tbody> </table>	POSITION	SAMPLE	TEMP	ΔT	CASE	DKE10A-05	40.9°C	15.9°C	P
POSITION	SAMPLE	TEMP	ΔT								
CASE	DKE10A-05	40.9°C	15.9°C								
15	CONSTRUCTION INSPECTION ( FOR QC INSPECTION REFERENCE ONLY )	1. PACKING : 以塑膠泡墊保護PIN腳,再以紙盒包裝 2. MARKING : MODEL LABEL 3. MECHANICAL : SIX-SIDED SHIELD METAL CASE.									
DATE	SAMPLE	TEST RESULT	TEST	APPROVAL							
1999.02.12	DKE10A-05 DKE10A-12 DKE10A-15	PASS	鄭讚國	MAX LIN							

[PREVIOUS](#)