

Quality Engineering Test Report

SERIES: DKE10B

10W DC-DC DUAL OUTPUT CONVERTER

SAMPLE:	A. DKE10B-05	V1: +5V / 1000mA
		V2: - 5V / 1000mA
	B. DKE10B-12	V1: +12V / 420mA
		V2: - 12V / 420mA
	C. DKE10B-15	V1: +15V / 333mA
		V2: - 15V / 333mA

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	DC INPUT VOLTAGE RANGE	I/P : TESTING SPEC : 18~36VDC O/P : FULL LOAD	C:16.5~36VDC	P
2	LINE REGULATION	I/P : 18~36VDC SPEC : ±0.3% O/P : FULL LOAD	A: V1: -0.2%~+0% V2: -0.2%~+0.2% B: V1: -0.08%~+0% V2: -0.17%~+0.08% C: V1: -0.01%~ +0.01% V2: -0.01%~ +0.01%	P
3	LOAD REGULATION	I/P : 24VDC SPEC : ±2% O/P : MIN. TO FULL LOAD	A: V1: -0%~+0% V2: -0.2%~+0% B: V1: -0.1%~+0% V2: -0.1%~+0% C: V1: -0.1%~ +0% V2: -0.2%~ +0%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P : 18~36VDC SPEC : NONE O/P : MIN. TO FULL LOAD	A: V1: -1.4%~+3.2% V2: -1.8%~+3.0% B: V1: -1.7%~+1.7% V2: -1.8%~+1.4% C: V1: -0.13%~ +0% V2: -0.16%~ +0%	P
5	RIPPLE & NOISE	I/P : 24VDC SPEC : A:50mV B:60mV C:60mV O/P : FULL LOAD	A: V1:17mV V2:15mV B: V1:23mV V2:20mV C: V1:24mV V2:28mV	P
6	DC INPUT CURRENT	I/P : 24VDC SPEC : NONE O/P : FULL LOAD	C:0.51A	P
7	MAX. INRUSH CURRENT	I/P : 24VDC SPEC : NONE O/P : FULL LOAD	C:15.97A	P
8	O/P VOLTAGE ACCURACY	I/P : 24VDC SPEC : ±2% O/P : MIN. LOAD	A: V1:+5.02V V2:-5.01V B: V1:+12.1V V2:-12.08V C: V1:+15.38V V2:-15.40V	P
9	SET UP TIME	I/P : 24VDC SPEC : NONE O/P : FULL LOAD	C:52.8mS	P
10	HOLD UP TIME	I/P : 24VDC SPEC : NONE O/P : FULL LOAD	C:1.65mS	P
11	EFFICIENCY	I/P : 24VDC SPEC : 76% MIN O/P : FULL LOAD	A:83.3% B:86.2% C:79.2%	P
12	OVER LOAD PROTECTION	I/P : 24VDC SPEC : NONE O/P : TESTING	CURRENT LIMITING AUTO RECOVERY A:173% B:158% C:188%	P

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT								
13	INSULATION RESISTANCE	SPEC : I/P – O/P 500VDC/100MΩ MIN.	C:I/P – O/P >100M Ω	P								
14	DIELECTRIC / WITHSTAND VOLTAGE	SPEC : I/P – O/P : 500VDC/ 1 min (10mA CUT-OFF)	C:NO BREAK I/P – O/P : <0.5mA	P								
15	BURN-IN TEST	I/P:24VDC TA:25 °C O/P:FULL LOAD BURN-IN DURATION : 4hrs	A:NO BREAK B:NO BREAK C:NO BREAK	P								
16	TEMPERATURE RISE TEST ΔT OF PARTS	C:I/P : 24VDC O/P : FULL LOAD AFTER 4 hrs BURN-IN TA : 25 °C		P								
		<table border="1"> <thead> <tr> <th>POSITION</th> <th>SAMPLE</th> <th>TEMP</th> <th>ΔT</th> </tr> </thead> <tbody> <tr> <td>CASE</td> <td>DKE10B-15</td> <td>51.6°C</td> <td>26.6°C</td> </tr> </tbody> </table>	POSITION	SAMPLE	TEMP	ΔT	CASE	DKE10B-15	51.6°C	26.6°C		
POSITION	SAMPLE	TEMP	ΔT									
CASE	DKE10B-15	51.6°C	26.6°C									
17	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 LABELx1 3. MECHANICAL : SIX-SIDED SHIELD METAL CASE, PIN OUTPUT:1.0φx7mm										
DATE	SAMPLE	TEST RESULT	TEST	APPROVAL								
980413	DKE10B-15	PASS	鄭讚國	MAX LIN								
980730	DKE10B-05 DKE10B-12	PASS	鄭讚國	MAX LIN								