

Model : TKA30C-C      25W  
 V1 : +5V / 350~3500mA  
 V2 : +15V / 25~250mA  
 V3 : -15V / 25~250mA

**OUTPUT FUNCTION TEST**

| NO | TEST ITEM               | SPECICATION  | TEST CONDITION                               | RESULT  | VERDICT |
|----|-------------------------|--|--|---|---------|
| 1  | OUTPUT VOLTAGE ACCURACY | V1:-2%~+2%<br>V2:-5%~+5%<br>V3:-5%~+5%             | I/P: 48VDC<br>O/P:50% LOAD<br>Ta:25°C        | V1: +0.6%<br>V2: +2.2%<br>V3: +2.2%                     | P       |
| 2  | RIPPLE & NOISE          | V1:100mVp-p<br>V2:100mVp-p<br>V3:100mVp-p          | I/P:48VDC<br>O/P:FULL LOAD<br>Ta:25°C        | V1: 55mVp-p<br>V2: 22mVp-p<br>V3: 28mVp-p               | P       |
| 3  | LINE REGULATION         | V1:-0.5%~+0.5%<br>V2:-1.0%~+1.0%<br>V3:-1.0%~+1.0% | I/P:36VDC ~72VDC<br>O/P:FULL LOAD<br>Ta:25°C | V1: -0%~+0%<br>V2: -0.1%~+0%<br>V3: -0.1%~+0%           | P       |
| 4  | LOAD REGULATION         | V1:-2.0%~+2.0%<br>V2:-5.0%~+5.0%<br>V3:-5.0%~+5.0% | I/P:48VDC<br>O/P:FULL ~MIN LOAD<br>Ta:25°C   | V1: -0.2%~+0%<br>V2: -0.92%~+2.16%<br>V3: -0.98%~+2.16% | P       |

**INPUT FUNCTION TEST**

| NO | TEST ITEM           | SPECICATION                                   | TEST CONDITION                             | RESULT                              | VERDICT |
|----|---------------------|---|--|-------------------------------------|---------|
| 1  | INPUT VOLTAGE RANGE | 36~72VDC (Typ)                                | I/P:TESTING<br>O/P:FULL LOAD<br>Ta:25°C    | 24~72VDC                            | P       |
| 2  | EFFICIENCY          | 82% (Typ)                                     | I/P:48VDC<br>O/P:FULL LOAD<br>Ta:25°C      | 83.3%                               | P       |
| 3  | INPUT CURRENT       | 0.64A (Typ.) FULL LOAD<br>10mA (Typ.) NO LOAD | I/P:48VDC<br>O/P:NO / FULL LOAD<br>Ta:25°C | 0.639A / FULL LOAD<br>8mA / NO LOAD | P       |

**PROTECTION FUNCTION TEST**

| NO | TEST ITEM            | SPECICATION                            | TEST CONDITION                        | RESULT                                   | VERDICT |
|----|----------------------|--|---------------------------------------|--|---------|
| 1  | OVER LOAD PROTECTION | 110% ~ 250%                            | I/P:48VDC<br>O/P:TESTING<br>Ta:25°C   | 135%<br>HICCUP MODE<br>AUTO-RECOVER      | P       |
| 2  | SHORT PROTECTION     | SHORT EVERY OUTPUT<br>1 HOUR NO DAMAGE | I/P:72VDC<br>O/P:FULL LOAD<br>Ta:25°C | NO DAMAGE<br>HICCUP MODE<br>AUTO-RECOVER | P       |

**CONTROL FUNCTION TEST**

| NO | TEST ITEM      | SPECICATION   | TEST CONDITION                        | RESULT   | VERDICT |
|----|----------------|---|---------------------------------------|--|---------|
| 1  | REMOTE CONTROL | Power on :<br>R.C >4.5~5.5V or open<br>Power off :<br>R.C <0.8V or short (-Vin) | I/P:48VDC<br>O/P:FULL LOAD<br>Ta:25°C | Power on :<br>R.C>3.3Vdc OR Open<br>Power off :<br>R.C<3.0Vdc OR Short | P       |

**ENVIRONMENT TEST**

| NO | TEST ITEM             | SPECICATION   | TEST CONDITION | RESULT   | VERDICT |        |
|----|-----------------------|---|----------------|----------|---------|--------|
| 1  | TEMPERATURE RISE TEST | 1. ROOM AMBIENT BURN-IN : 2HRS<br>I/P:48VDC O/P:FULL LOAD Ta=25.1°C |                |          | P       |        |
|    |                       |   | Position       | CENTER   |         | 1      |
|    |                       |   | CASE           | TKA30C-C |         | 49.7°C |

**E.M.C TEST**

| NO | TEST ITEM            | SPECICATION   | TEST CONDITION                        | RESULT                       | VERDICT |
|----|----------------------|---|---------------------------------------|------------------------------|---------|
| 1  | RADIATION            | EN55022<br>CLASS A                                      | I/P:48VDC<br>O/P:FULL LOAD<br>Ta:25°C | PASS                         | P       |
| 2  | E.S.D                | IEC61000-4-2<br>LIGHT INDUSTRY<br>AIR:8KV / Contact:4KV | I/P:48VDC<br>O/P:FULL LOAD<br>Ta:25°C | CRITERIA A                   | P       |
| 3  | E.F.T                | IEC61000-4-4<br>LIGHT INDUSTRY<br>INPUT: 0.5KV          | I/P:48VDC<br>O/P:FULL LOAD<br>Ta:25°C | CRITERIA A                   | P       |
| 4  | SURGE                | IEC61000-4-5<br>LIGHT INDUSTRY<br>L-L :0.5KV            | I/P:48VDC<br>O/P:FULL LOAD<br>Ta:25°C | CRITERIA A                   | P       |
| 5  | WITHSTAND VOLTAGE    | I/P-O/P:1KVDC/min                                       | I/P-O/P:1KVDC/min<br>Ta:25°C          | I/P-O/P:0.002mA<br>NO DAMAGE | P       |
| 6  | ISOLATION RESISTANCE | I/P-O/P:500VDC>100MΩ                                    | I/P-O/P:500VDC<br>Ta:25°C             | I/P-O/P:>100MΩ<br>NO DAMAGE  | P       |

| DATE      | SAMPLE   | TEST RESULT | TESTER | APPROVAL  |
|-----------|----------|-------------|--------|-----------|
| 2008.8.15 | TKA30C-C | PASS        | PETER  | T.K.CHENG |