



## Features :

- 2"x2" compact size
- 2:1 wide input range
- High efficiency up to 93%
- 1500VDC I/O isolation
- Built-in remote ON / OFF control
- Built-in remote sense
- Trimming output  $\pm 0\%$
- Comply with CE / FCC without external components
- Protections: Short circuit / Overload / Input and output Over voltage
- Cooling by free air convection
- Six-sided shield metal case
- 100% burn-in test
- Low cost / High reliability
- Output 3.3V available
- 2 years warranty



## SPECIFICATION

| ORDER NO.                      |                                             | SKA60A-05                                                                                           | SKA60B-05                                                                                                                                                          | SKA60C-05 | SKA60A-12 | SKA60B-12 | SKA60C-12 | SKA60A-15 | SKA60B-15 | SKA60C-15 |        |
|--------------------------------|---------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| OUTPUT                         | DC VOLTAGE                                  | 5V                                                                                                  |                                                                                                                                                                    |           | 12V       |           |           | 15V       |           |           |        |
|                                | CURRENT RANGE                               | 1.2 ~ 12A                                                                                           |                                                                                                                                                                    |           | 0.5 ~ 5A  |           |           | 0.4 ~ 4A  |           |           |        |
|                                | RATED POWER                                 | 60W                                                                                                 |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | RIPPLE & NOISE (max.) <small>Note.2</small> | 60mVp-p                                                                                             |                                                                                                                                                                    |           | 80mVp-p   |           |           | 100mVp-p  |           |           |        |
|                                | LINE REGULATION <small>Note.3</small>       | ±0.5%                                                                                               |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | LOAD REGULATION <small>Note.4</small>       | ±0.5%                                                                                               |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | VOLTAGE ACCURACY                            | ±2.0%                                                                                               |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | SWITCHING FREQUENCY                         | 250KHz min.                                                                                         |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | EXTERNAL CAPACITANCE LOAD (max.)            | 1000uF                                                                                              |                                                                                                                                                                    |           | 220uF     |           |           | 100uF     |           |           |        |
| EXTERNAL TRIM Adj. RANGE(Typ.) | ±10%                                        |                                                                                                     |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
| INPUT                          | VOLTAGE RANGE                               | A: 9 ~ 18VDC   B: 18 ~ 36VDC   C: 36 ~ 75VDC                                                        |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | EFFICIENCY (Typ.)                           | 91%                                                                                                 | 90.5%                                                                                                                                                              | 92%       | 92%       | 92.5%     | 92%       | 92%       | 93%       | 92.5%     |        |
|                                | DC CURRENT                                  | Full load                                                                                           | 5505mA                                                                                                                                                             | 2775mA    | 1370mA    | 5445mA    | 2715mA    | 1370mA    | 5400mA    | 2690mA    | 1370mA |
|                                | DC CURRENT                                  | No load                                                                                             | 185mA                                                                                                                                                              | 120mA     | 60mA      | 160mA     | 120mA     | 60mA      | 160mA     | 120mA     | 85mA   |
|                                | FILTER                                      | Pi network                                                                                          |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | REMOTE CONTROL                              | Power ON : R.C ~ -Vin > 2.5VDC or open circuit ; Power OFF : R.C ~ -Vin < 0.5VDC or short           |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
| PROTECTION                     | Fuse recommended                            |                                                                                                     |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
| PROTECTION<br>(Note. 5)        | OVER CURRENT                                | 110% ~ 160% rated output power                                                                      |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                |                                             | Protection type : Hiccup mode, recovers automatically after fault condition is removed              |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | SHORT CIRCUIT                               | All output equipped with short circuit                                                              |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                |                                             | Protection type : Hiccup mode, recovers automatically after fault condition is removed              |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | OVER VOLTAGE                                | Input(Typ.)                                                                                         | A: >20 ~ 25VDC   B: >40 ~ 50VDC   C: >80 ~ 100VDC input voltage   Protection type : Shut down o/p voltage, recovers automatically after fault condition is removed |           |           |           |           |           |           |           |        |
|                                | Output(Typ.)                                | 5Vo : 7V ~ 8.95V ; 12Vo : 15V ~ 19.2V ; 15Vo : 18V ~ 23.3V   Protection type : Clamp by TVS diode   |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
| ENVIRONMENT                    | WORKING TEMP.                               | -40 ~ +70℃ (Refer to "Derating Curve")                                                              |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | CASE TEMP.                                  | +100℃ max.                                                                                          |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | WORKING HUMIDITY                            | 20% ~ 90% RH non-condensing                                                                         |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | STORAGE TEMP., HUMIDITY                     | -55 ~ +105℃, 10 ~ 95% RH                                                                            |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | TEMP. COEFFICIENT                           | ±0.03% / °C (0 ~ 50℃)                                                                               |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | VIBRATION                                   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                             |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
| SAFETY & EMC                   | SAFETY STANDARDS                            | EAC TP TC 020/2011 (EAC TP TC 004 for 48Vin type only) approved                                     |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | WITHSTAND VOLTAGE                           | I/P-O/P:1.5KVDC                                                                                     |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | ISOLATION RESISTANCE                        | I/P-O/P: 100M Ohms / 500VDC / 25℃ / 70% RH                                                          |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | EMC EMISSION                                | Compliance to BS EN/EN55032 Class A, FCC part 15 Class A without external components, EAC TP TC 020 |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | EMC IMMUNITY                                | Compliance to BS EN/EN61000-4-2,3,4,5,6,8, light industry level, criteria A, EAC TP TC 020          |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
| OTHERS                         | DIMENSION                                   | 50.8*50.8*11.0 mm or 2"*2"*0.43" inch (L*W*H)                                                       |                                                                                                                                                                    |           |           |           |           |           |           |           |        |
|                                | WEIGHT                                      | 67g                                                                                                 |                                                                                                                                                                    |           |           |           |           |           |           |           |        |

## Mechanical Specification

