# 30 Q W K 2 C Z 47 

## Switching Type Power Supply Application

## Converter \& Chopper Application

- Repetitive peak reverse voltage: VRRM $=120 \mathrm{~V}$
- Peak Forward Voltage: VFM $=0.85 \mathrm{~V}$ (max)
- Average output recified current: $\mathrm{IO}=30 \mathrm{~A}$
- Low switching losses and output noise.


## Maximum Ratings

| Characteristics | Symbol | Rating | Unit |
| :--- | :---: | :---: | :---: |
| Repetitive peak reverse voltage | $\mathrm{V}_{\text {RRM }}$ | 120 | V |
| Average output recified current | $\mathrm{I}_{\mathrm{O}}$ | 30 | A |
| Peak one cycle surge forward current <br> (non-repetitive, sine wave) | $\mathrm{I}_{\mathrm{FSM}}$ | $250(50 \mathrm{~Hz})$ | A |
| Junction temperature | $\mathrm{T}_{\mathrm{j}}$ | $-40 \sim 150$ | ${ }^{\circ} \mathrm{C}$ |
| Storage temperature range | $\mathrm{T}_{\text {stg }}$ | $-40 \sim 150$ | ${ }^{\circ} \mathrm{C}$ |
| Screw Torque | - | 0.6 | $\mathrm{~N} \cdot \mathrm{~m}$ |

Unit in mm


Weight : 2.0 g
Electrical Characteristics ( $\mathrm{Ta}=25^{\circ} \mathrm{C}$ )

| Characteristics | Symbol | Test Condition | Min | Typ. | Max |
| :--- | :---: | :--- | :---: | :---: | :---: |
| Unit |  |  |  |  |  |
| Peak forward voltage | $\mathrm{V}_{\mathrm{FM}}$ | $\mathrm{I}_{\mathrm{FM}}=15 \mathrm{~A}$ | - | - | 0.85 |
| Repetitive peak reverse current | $\mathrm{I}_{\mathrm{RRM}}$ | $\mathrm{V}_{\mathrm{RRM}}=$ Rated $(120 \mathrm{~V})$ | V |  |  |
| Junction capacitance | $\mathrm{C}_{\mathrm{j}}$ | $\mathrm{V}_{\mathrm{R}}=10 \mathrm{~V}, \mathrm{f}=1.0 \mathrm{MHz}$ | - | - | 50 |
| Thermal resistance | $\mathrm{R}_{\text {th }}(\mathrm{j}-\mathrm{c})$ | DC Total, Junction to case | - | 227 | - |

Note: $V_{F M}, I_{R R M}, C_{j}$ : A value of one cell.

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## Polarity



Marking

| ※1 | MARK | 30QWK2C | TYPE | 30QWK2CZ47 |
| :---: | :---: | :---: | :---: | :---: |
| $※ 2$ | None |  |  |  |
| ※3 | Lot Number$\square$$\square$ - Month (starting from alphabet A)$\square$ Year (last number of the christian era) |  |  |  |

## Handling Precaution

Schottky barrier diodes are having large-reverse-current-leakage characteristic compare to other rectifier products. This current leakage and not proper operating temperature or voltage may cause thermal run.

Please take forward and reverse loss into consideration when you design.







