

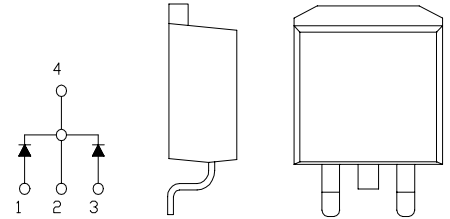
# FRD Type : TCU10A60

## OUTLINE DRAWING

For Power Factor Improvement High Frequency Rectification

### FEATURES

- \* Dual Diodes – Cathode Common
- \* Ultra – Fast Recovery
- \* Low Forward Voltage Drop
- \* High Surge Capability



### Maximum Ratings

Approx Net Weight:1.45g

| Rating                              | Symbol              | TCU10A60      |                                               |                                        | Unit |
|-------------------------------------|---------------------|---------------|-----------------------------------------------|----------------------------------------|------|
| Repetitive Peak Reverse Voltage     | V <sub>RRM</sub>    | 600           |                                               |                                        | V    |
| Average Rectified Output Current    | I <sub>O</sub>      | 10            | Tc=84℃                                        | 50 Hz,Full Sine Wave<br>Resistive Load | A    |
| RMS Forward Current                 | I <sub>F(RMS)</sub> | 11.1          |                                               |                                        | A    |
| Surge Forward Current               | I <sub>FSM</sub>    | 70            | 50 Hz Full Sine Wave,1cycle<br>Non-repetitive |                                        | A    |
| Operating JunctionTemperature Range | T <sub>jw</sub>     | - 40 to + 150 |                                               |                                        | ℃    |
| Storage Temperature Range           | T <sub>stg</sub>    | - 40 to + 150 |                                               |                                        | ℃    |
| Mounting torque                     |                     | 0.5           | Recommended value                             |                                        | N•m  |

### Electrical • Thermal Characteristics

| Characteristics       | Symbol        | Conditions                                                                         | Min. | Typ. | Max. | Unit                        |
|-----------------------|---------------|------------------------------------------------------------------------------------|------|------|------|-----------------------------|
| Peak Reverse Current  | $I_{RM}$      | $T_j=25^{\circ}\text{C}, V_{RM}=V_{RRM}$ per Arm                                   | -    | -    | 30   | $\mu\text{A}$               |
| Peak Forward Voltage  | $V_{FM}$      | $T_j=25^{\circ}\text{C}, I_{FM}=5\text{A}$ per Arm                                 | -    | 1.9  | 2.3  | V                           |
| Reverse Recovery Time | $t_{rr}$      | $I_{FM}=5\text{A}$ ,<br>$-di/dt=50\text{A}/\mu\text{s}$ , $T_a=25^{\circ}\text{C}$ | -    | 25   | 35   | ns                          |
| Thermal Resistance    | $R_{th(j-c)}$ | Junction to Case                                                                   | -    | -    | 3    | $^{\circ}\text{C}/\text{W}$ |

TCU10A60 OUTLINE DRAWING (Dimensions in mm)

