

**FAST Diode Modules**

P/N: YZPST-DFM3000WXS17-A000

**Features**

- Heat Transfer Through Aluminium Oxide Ceramic Isolated Metal Baseplate
- Hard Soldered Joints For High Reliability
- UL Recognized

**Typical Applications**

- Rectifier for drives applications
- Rectifiers for UBS
- Battery chargers

**BLOCKING**

| Symbol                 | Condition  | Ratings      | Unit |
|------------------------|--|--------------|------|
| $V_{RRM}$<br>$V_{RSM}$ | $T_j = T_j \text{ Max.}$   | 1700<br>1800 | V    |
| $I_{RRM}$              | At $V_{RRM}$ , Single phase, half wave, $T_j = T_j \text{ Max.}$ | 10           | mA   |
| $V_{ISOL}$             | 50Hz, 1S/1MIN  | 4800/4000    | V    |

**CONDUCTING**

| Symbol       | Condition   | Ratings | Unit                  |
|--------------|---|---------|-----------------------|
| $I_{F(AV)}$  | $T_C = 65^\circ\text{C}$ ; 180° sine  | 300     | A                     |
| $I_{F(RMS)}$ | $T_C = 82^\circ\text{C}$ ; 180° sine  | -       | A                     |
| $I_{FSM}$    | $T_j = T_j \text{ Max.}$ ; t = 10 ms (50 Hz); sine  | 2449    | A                     |
| $I^2t$       | $T_j = T_j \text{ Max.}$ ; t = 10 ms (50 Hz); sine  | 30      | $\text{kA}^2\text{S}$ |
| $V_{F(TO)}$  | $T_j = T_j \text{ Max.}$  | -       | V                     |
| $r_F$        | $T_j = T_j \text{ Max.}$  | -       | m $\Omega$            |
| $V_{FM}$     | On-State Current 300A, $T_j = 125^\circ\text{C}$  | 2.05    | V                     |
| $T_{rr}$     | $T_j = 25^\circ\text{C}$ $I_F = 400\text{A}$ $-di/dt = 2250\text{A/us}$ $V_R = 900\text{V}$ | 900     | ns                    |

**Electrical Characteristics**

| Symbol        | Condition       | Ratings    | Unit               |
|---------------|-----------------|------------|--------------------|
| $R_{th(j-c)}$ | Per Module      | 0.10       | $^\circ\text{C/W}$ |
| $R_{th(c-h)}$ | Per Module      | 0.015      | $^\circ\text{C/W}$ |
| $T_j$         |                 | -40 ~ +125 | $^\circ\text{C}$   |
| $T_{stg}$     |                 | -40 ~ +125 | $^\circ\text{C}$   |
| M             | mounting torque | 5          | Nm                 |
|               | terminal torque | 5          | Nm                 |
| W             |                 | -          | g                  |

Outline Drawing

