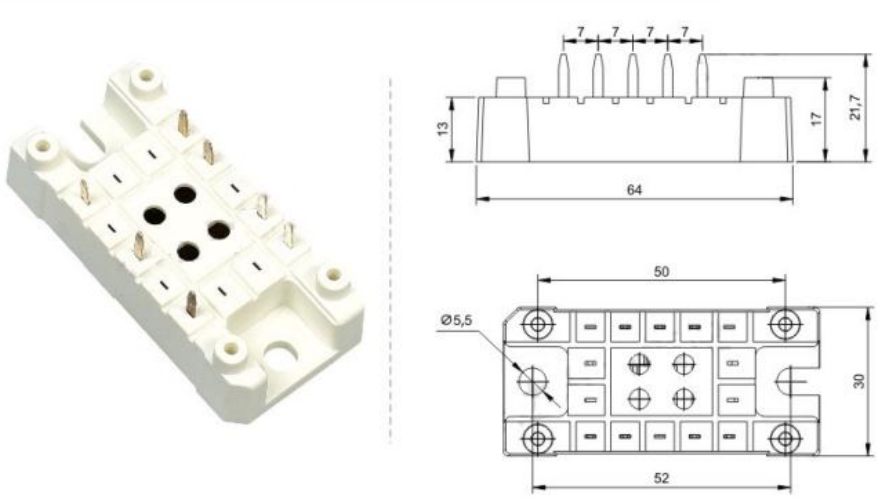
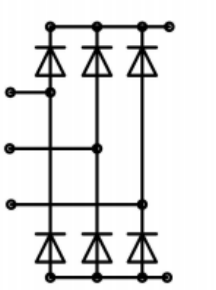
# POWER BRIDGE RECTIFIERS

## TYPE : YZPST-SKD83/16

| Parameter | Symbol | Conditions | Values | Units |
|---|---|---|---|---|
| Repetitive Peak Off-State Voltage | $V_{DRM}$ | | - | V |
| Non Repetitive Peak Off-State Voltage | $V_{DSM}$ | | - | |
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | | 1600 | V |
| Non Repetitive Peak Reverse Voltage | $V_{RSM}$ | | 1700 | V |
| Average Rectified Output Current | $I_{O(AV)}$ | $T_C$=95°C | 83 | A |
| Surge Forward Current | $I_{FSM}$ | 50Hz; Half Sine Wave,1Pulse, Non-Repetitive $T_j$= 150°C | 560 | A |
| I Squared t | $I^2t$ | 2msec to 10msec $T_j$= 150°C | 1.57 | $KA^2s$ |
| Surge On-State Current | $I_{TSM}$ | 50Hz; Half Sine Wave,1Pulse, Non-Repetitive | - | A |
| I Squared t | $I^2t$ | 2msec to 10msec | - | $KA^2s$ |
| Peak Forward Voltage | $V_{FM}$ | $T_j$=25°C; $I_F$=80A | 1.45 | V |
| Peak On-State Voltage | $V_{TM}$ | | - | |
| Threshold voltage | $V_{F(TO}$ | $T_j$= 150°C | 0.8 | V |
| Forward slope resistance | $r_F$ | $T_j$= 150°C | 7.5 | mΩ |
| Peak Reverse Current | $I_{RM}$ | $V_{RM}$= $V_{RRM}$, $T_j$= 125°C | - | mA |
| Critical Rate of Turned-On Current | di/dt | $V_D$=2/3$V_{DRM}$, $I_{TM}$=2•$I_O$, $T_j$=125°C $I_G$=200mA, $di_G/dt$=0.2A/μs | - | A/μs |
| Critical Rate of Rise of Off-State Voltage | dv/dt | $V_D$=2/3$V_{DRM}$ $T_j$=125°C | - | V/μs |
| Gate Current to Trigger | $I_{GT}$ | $V_D$=6V,$I_T$=1A,$T_j$=25°C | - | mA |
| Gate Voltage to Trigger | $V_{GT}$ | | - | V |
| Holding Current | $I_H$ | | - | mA |
| Thermal Resistance | $R_{th(j-c)}$ | Junction to Case | 1.4 | K /W |
| | $R_{th(c-f)}$ | Case to Fin | 2.83 | K /W |
| | $T_{vj}$ | | -40~+150 | °C |
| | $T_{stg}$ | | -40~+125 | °C |
| | $V_{isol}$ | a.c. 50Hz; r.m.s.; 1min./1S | 3000/3600 | V |
| Mounting torque | M | Case mounting Terminals | 2 | N.m |

OUTLINE DRAWING (Dimensions in mm)



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