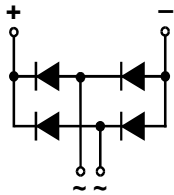
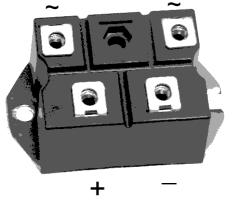


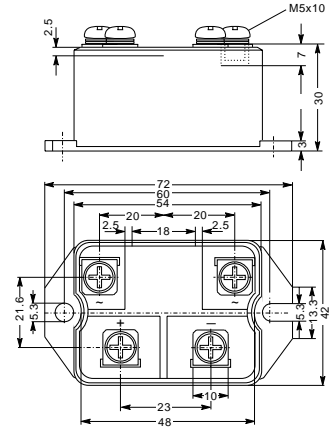
S1PDB60

Single Phase Bridge Rectifiers Modules



| Type | V_{RSM} V | V_{RRM} V |
|------------|----------------|----------------|
| S1PDB60N08 | 900 | 800 |
| S1PDB60N10 | 1100 | 1000 |
| S1PDB60N12 | 1300 | 1200 |
| S1PDB60N14 | 1500 | 1400 |
| S1PDB60N16 | 1700 | 1600 |
| S1PDB60N18 | 1900 | 1800 |

Dimensions in mm (1mm=0.0394")



| Symbol | Test Conditions | Maximum Ratings | Unit | |
|------------|----------------------------------------------------------|---------------------------------------------------------|------------------------------|----|
| I_{dav} | $T_C=100^{\circ}C$, module | 60 | A | |
| I_{dav} | $T_A=45^{\circ}C$ ($R_{thCA}=0.6K/W$), module | 48 | | |
| I_{FSM} | $T_{VJ}=45^{\circ}C$ $V_R=0$ $t=10ms$ (50Hz), sine | 550 | A | |
| | $T_{VJ}=T_{VJM}$ $V_R=0$ $t=8.3ms$ (60Hz), sine | 600 | | |
| I^2t | $T_{VJ}=45^{\circ}C$ $V_R=0$ $t=10ms$ (50Hz), sine | 500 | | |
| | $T_{VJ}=T_{VJM}$ $V_R=0$ $t=8.3ms$ (60Hz), sine | 550 | | |
| | $T_{VJ}=45^{\circ}C$ $V_R=0$ $t=10ms$ (50Hz), sine | 1520 | | |
| | $T_{VJ}=T_{VJM}$ $V_R=0$ $t=8.3ms$ (60Hz), sine | 1520 | | |
| T_{VJ} | | -40...+150 | $^{\circ}C$ | |
| T_{VJM} | | 150 | | |
| T_{stg} | | -40...+125 | | |
| V_{ISOL} | 50/60Hz, RMS $I_{ISOL} \leq 1mA$ | $t=1min$ $t=1s$ | 2500 3000 | V~ |
| | M_d | Mounting torque (M5) Terminal connection torque (M5) | $5 \pm 15\%$ $5 \pm 15\%$ | |
| Weight | typ. | | 160 | g |

S1PDB60

Single Phase Bridge Rectifiers Modules

| Symbol | Test Conditions | Characteristic Values | Unit |
|------------|---------------------------------------------------------------------------|------------------------|------------------|
| I_R | $V_R=V_{RRM}; T_{VJ}=25^{\circ}\text{C}$ $V_R=V_{RRM}; T_{VJ}=T_{VJM}$ | ≤ 0.3 ≤ 5 | mA |
| V_F | $I_F=150\text{A}; T_{VJ}=25^{\circ}\text{C}$ | ≤ 1.8 | V |
| V_{TO} | For power-loss calculations only | 0.8 | V |
| r_T | $T_{VJ}=T_{VJM}$ | 8 | $\text{m}\Omega$ |
| R_{thJC} | per diode per module | 1.45 0.24 | K/W |
| R_{thJK} | per diode per module | 1.87 0.31 | K/W |
| d_s | Creeping distance on surface | 10 | mm |
| d_A | Creepage distance in air | 9.4 | mm |
| a | Max. allowable acceleration | 50 | m/s^2 |

FEATURES

- * Package with screw terminals
- * Isolation voltage 3000 V~
- * Planar passivated chips
- * Blocking voltage up to 1800 V
- * Low forward voltage drop

APPLICATIONS

- * Supplies for DC power equipment
- * Input rectifiers for PWM inverter
- * Battery DC power supplies
- * Field supply for DC motors

ADVANTAGES

- * Easy to mount with two screws
- * Space and weight savings
- * Improved temperature and power cycling