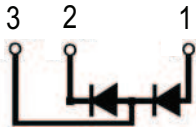
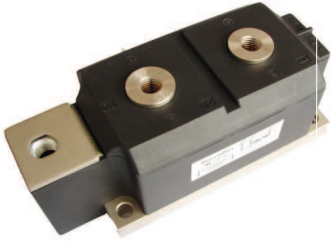


SDD800NXXPT

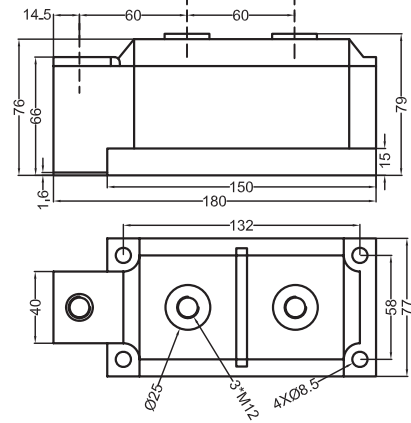
Diode-Diode Modules



| Type | V_{RSM} V | V_{RRM} V |
|-------------|----------------|----------------|
| SDD800N08PT | 900 | 800 |
| SDD800N12PT | 1300 | 1200 |
| SDD800N14PT | 1500 | 1400 |
| SDD800N16PT | 1700 | 1600 |
| SDD800N18PT | 1900 | 1800 |

Colerance: $\pm 0.5\text{mm}$

Dimensions in mm (1mm=0.0394")



| Symbol | Test Conditions | Maximum Ratings | Unit |
|------------------------------------|---|---------------------------------|----------------------|
| I_{FRMS} I_{FAVM} | $T_{VJ}=T_{VJM}$ $T_C=100^\circ\text{C}$; 180° sine | 1256 800 | A |
| I_{FSM} | $T_{VJ}=45^\circ\text{C}$ $V_R=0$ t=10ms (50Hz), sine t=8.3ms (60Hz), sine | 35000 32100 | A |
| | $T_{VJ}=T_{VJM}$ $V_R=0$ t=10ms(50Hz), sine t=8.3ms(60Hz), sine | 29200 27000 | |
| $\int i^2 dt$ | $T_{VJ}=45^\circ\text{C}$ $V_R=0$ t=10ms (50Hz), sine t=8.3ms (60Hz), sine | 6805000 6683000 | A^2s |
| | $T_{VJ}=T_{VJM}$ $V_R=0$ t=10ms(50Hz), sine t=8.3ms(60Hz), sine | 6319000 6230000 | |
| T_{VJ} T_{VJM} T_{stg} | | -40...+150 150 -40...+125 | $^\circ\text{C}$ |
| V_{ISOL} | 50/60Hz, RMS $I_{ISOL} \leq 1\text{mA}$ t=1min t=1s | 3000 3600 | V~ |
| M_d | Mounting torque (M6) Terminal connection torque (M12) | 4.5-7/40-60 11-13/97-115 | Nm/lb.in. |
| Weight | Typ. | 3342 | g |

SDD800NXXPT

Diode-Diode Modules

| Symbol | Test Conditions | Characteristic Values | Unit |
|-------------------------|----------------------------------|-----------------------|------------------|
| I_{RRM} | $T_{VJ}=T_{VJM}; V_R=V_{RRM}$ | 50 | mA |
| V_F | $I_F=2400A; T_{VJ}=25^{\circ}C$ | 1.45 | V |
| V_{TO} | For power-loss calculations only | 0.75 | V |
| r_T | $T_{VJ}=T_{VJM}$ | 0.25 | m Ω |
| R_{thJC} | per junction; DC current | 0.045 | K/W |
| R_{thJK} | per junction; DC current | 0.05 | K/W |
| d_s | Creepage distance on surface | 12.7 | mm |
| d_A | Strike distance through air | 9.6 | mm |
| a | Maximum allowable acceleration | 50 | m/s ² |

FEATURES

- * International standard package
- * Copper base plate
- * Glass passivated chips
- * Isolation voltage 3600 V~
- * RoHs compliant

APPLICATIONS

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

ADVANTAGES

- * Space and weight savings
- * Simple mounting
- * Improved temperature and power cycling
- * Reduced protection circuits

SDD800NXXPT

Diode-Diode Modules

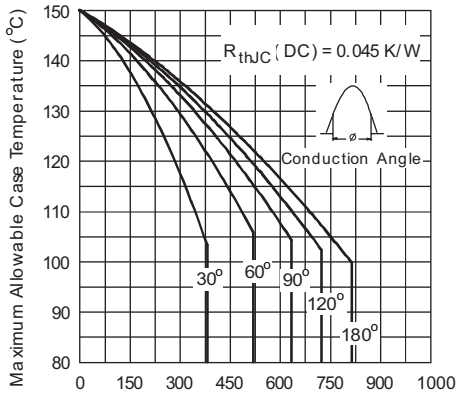


Fig.1 Average Forward Current (A)

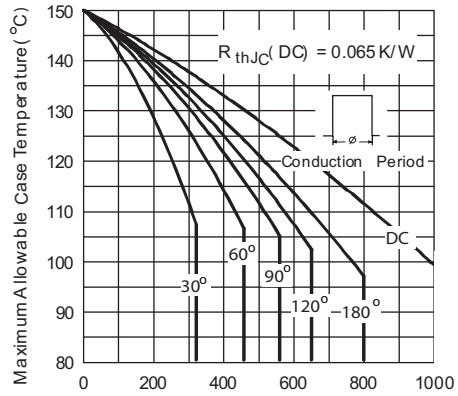


Fig.2 Average Forward Current (A)

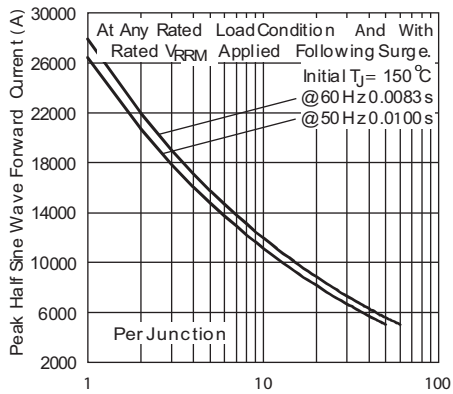


Fig.3 Number Of Equal Amplitude Half Cycle Current Pulses (N)

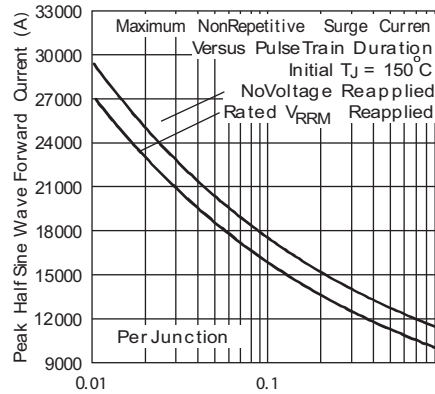


Fig.4 Pulse Train Duration (s)

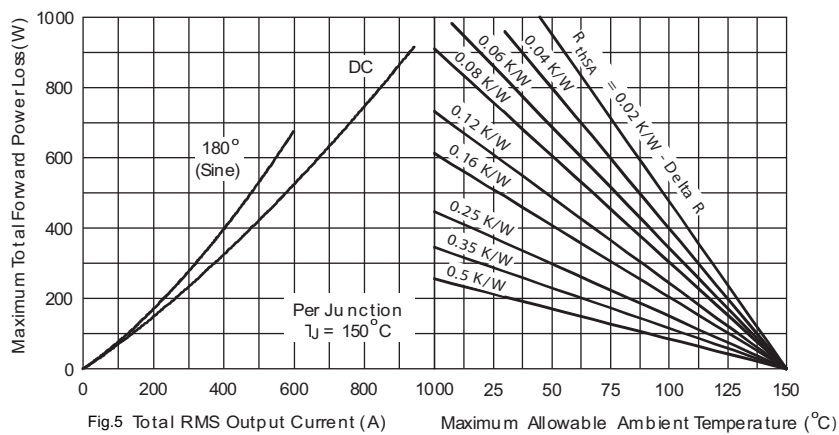


Fig.5 Total RMS Output Current (A)

Maximum Allowable Ambient Temperature (°C)

SDD800NXXPT

Diode-Diode Modules

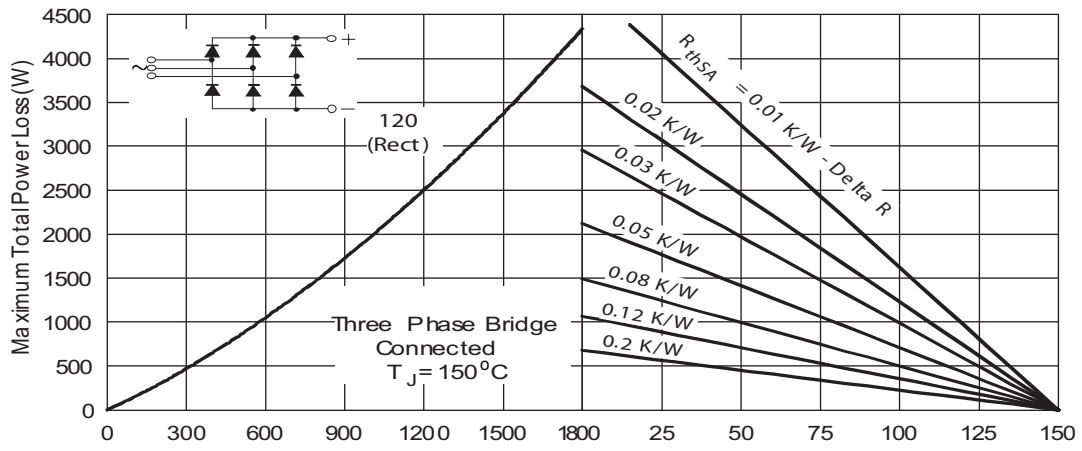


Fig.6 Total Output Current (A)

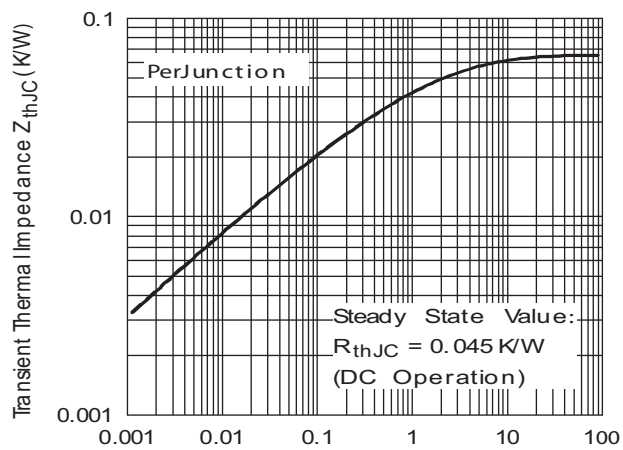


Fig.7 Square Wave Pulse Duration (s)